

AMERICAN BEE JOURNAL



APRIL

Volume 93, No. 4

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Be safe and place your order early for your favorite shipping
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Queens	2-lb. W/Q	3-lb. W/Q	Queens	2-lb. W/Q	3-lb. W/Q
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99-up	1.30	3.65	4.65	1.00	3.40

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Select Tested in Large Cage — \$2.00
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for 1953**

Quantity 1 to 11 12 or more

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Prices are F.O.B. Tifton, Ga. Safe arrival guaranteed.

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Logan Kindscher, of Redlands, Calif., uses this truck with a specially built low truck bed to move bees. The hives are tied down securely and covered with a Lumite cloth cover which confines the bees but allows ventilation.

J. E. Eckert, California

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April, 1953

THE AMERICAN BEE JOURNAL

HAMILTON, ILLINOIS

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This photo of a bee on a daffodil was taken inside a glass house at the same time as the picture on page 104 of our March issue showing a heavy snowfall. Both pictures were from John Tanner, of Scotland.

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OUR COVER PICTURE

The bee on apple bloom comes from Herman F. Menke, Harrah, Washington. This honey-girl is digging in a nectar mine and getting herself all dusted with pollen. So, the next flower may get some of that pollen and, if the variety is right, presto, we have an apple!

HARPER'S FAMOUS High Quality Italian Queens & Package Bees

Lots of	2-lbs.	3-lbs.	4-lbs.	5-lbs.
1-29	\$3.25	\$4.00	\$4.65	\$5.50
30 & Up	3.00	3.75	4.00	5.25

Queens \$1.00 each.

Bees are very prolific and Extra Good Honey Gatherers. Send your rush orders to me for PROMPT SERVICE and Shipment. Health Certificate and Live Arrival Guaranteed.

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Select Italians

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Satisfaction guaranteed.

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Good Quality Caucasian Package BEES AND QUEENS

Queens—\$1.00 each
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A. G. WOODMAN CO.

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Dadant's Starline Hybrids and our 3-Banded Italians

	1-24	25-99	100-up
Select Queens	\$1.25	\$1.15	\$1.05
2-lb. package	3.75	3.50	3.25
3-lb. package	4.75	4.50	4.25

Above prices are for our regular stock. For Dadant's Starline Hybrids add 25c per item.

Shipments Start April 1st to Oct. 15th. Our business has been built on Quality, Service and Customer Satisfaction.

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CASLOADS AND LESS THAN CASLOADS
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Cameron, Texas

By Express, Parcel Post or Truck

Your Choice of Italian or Caucasian Queens

	1 pkg.	2 or more
2-lb. bees with young queen	\$3.25 each	\$3.00 each
3-lb. bees with young queen	4.25 each	4.00 each

Over a quarter century in the same place, same business, under the same name, is my record. My motto: I expect to do business with you again.

H. E. GRAHAM

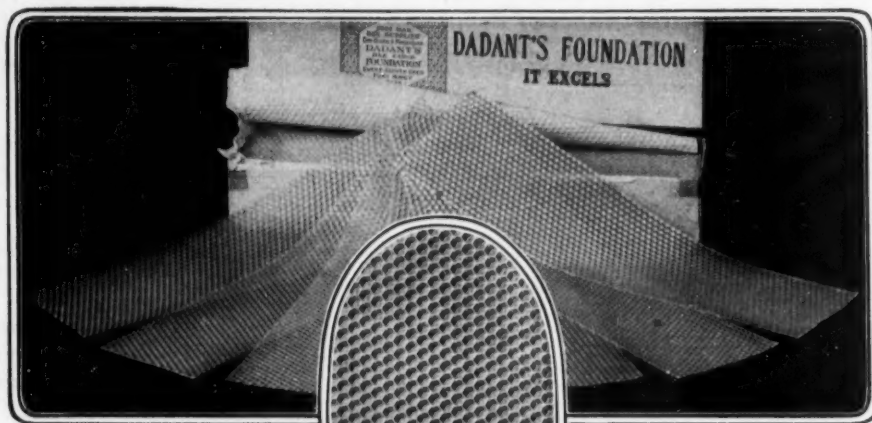
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CAUCASIAN

Queens and Packages for '53

D. T. WINSLETT

7736 Auburn Road
Citrus Heights, Calif.



**Dadant's
Supreme**

**Super
Foundation**

The kind that will give you high quality comb honey, either section or bulk. The biting quality at the base of honey which folks eat should be so much a part of each mouthful that the wax crumbles under the tongue; delicate, tasty, downright good. That is the quality you get from Dadant's Supreme Super Foundation so customers always come back for more.

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Hamilton, Illinois

Paris, Texas

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in the

LOTZ SECTION

No Finer Section Made

Also

A Complete Line of Bee Supplies

Woodenware

Foundation

Containers

Accessories

Write for Prices

AUGUST LOTZ COMPANY

Manufacturers & Jobbers

Boyd, Wisconsin

JENSEN says—



QUALITY SPEAKS! First come, first served. This may sound terse, but the way orders are coming in we may soon have to check up on bookings, or give second choice of dates. Though our production of both packages and queens has been stepped up, and facilities for expediting handling orders improved, it appears we may not have quite kept pace with the tempo of optimism prevailing among beekeepers even now.

"Magnolia State" Italians

Productive and Gentle.

Predominately young bees, no drones, full weights.

Quantities	Queens	2-Lb. Pkgs. W/Q	3-Lb. Pkgs. W/Q
1-24	\$1.25	\$3.75	\$4.75
25-99	1.15	3.50	4.50
100-up	1.05	3.25	4.25

Dadant's Improved "Starline" Hybrid Queens add 25c per Queen or package of bees to above prices. Wonderful producers and gentle. Clipped and Marked FREE.



Reg. U.S. Pat. Off.

Queens Postpaid, via Air Mail where expedient. Package Bees by Express Collect. If Parcel Post shipment is desired include postage, write us for rate.

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N. C. Jensen, Queen Breeder
Eugene Jensen, Apiary Manager

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QUALITY AND SERVICE

7,500
Colonies

Your Choice of Two Outstanding Strains

Quality Bred Dadant's Starline Hybrids

Quality Bred Italians

The Preference of Leading Honey Producers



Reg. U.S. Pat. Off.

PACKAGES WITH ITALIAN QUEENS

Quantity	1-24	25-99	100 up
2-lb. pkg.	\$3.75	\$3.50	\$3.25
3-lb. pkg.	4.75	4.50	4.25
4-lb. pkg.	5.75	5.50	5.25
5-lb. pkg.	6.75	6.50	6.25
Extra Queens	1.30	1.20	1.10

Queenless packages deduct \$1.00 per package. Tested queens add \$1.00 each extra. Above prices are for/or with our regular line Italians. For DADANT'S STARLINE HYBRIDS add 25c additional to above prices.

Shipment by express, parcel post, or your truck. Detailed information available. Book your order now without delay and have your bees shipped when wanted.

YORK BEE COMPANY

Jesup, Georgia, U.S.A.

(The Universal Apiaries)

1953 CATALOG



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QUALITY at LOW COST
Look For This Sign

Trade Mk. Reg.
U. S. Pat. Off.

KELLEY—"The Bee Man"

We publish by far the largest bee supply catalog in the industry and if you have not received your copy write for it today. We list many items not found in the other catalogs, items that you need and cannot afford to be without.

Selling direct to you beekeepers, we list very low prices on the highest quality equipment. We carry carloads of equipment in stock so as to be able to ship your orders the same day as received. Remember—we are the factory; manufacturing beehives, frames, comb foundation, extractors and tanks, veils, gloves, etc.

The Walter T. Kelley Co.
CLARKSON, KY.

GOOD "GULF BREEZE" ITALIANS

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PRICES:

Quantity	Queens	2-lb. Pkg. W. Q.	3-lb. Pkg. W. Q.	4-lb. Pkg. W. Q.
1-24	\$1.25	\$3.50	\$4.40	\$5.40
25-99	1.15	3.35	4.25	5.25
100-500	1.10	3.25	4.15	5.15

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BEE COMPANY**

Donaldsonville, La.

Attention, Please!



Bees . . for pleasure and profit

This covers Mr. Beekeeper, large or small; Mr. Farmer, who grows seed crops which need bees for pollination to ensure more and better seed production (when seed crops are pollinated by bees); and Mr. Fruit-grower, who needs bees for pollination in 1953. We warn with an important message to one and all: If you have tried and failed, you must try again. Don't give up the ship. We haven't, and both success and pleasure have come our way.

DON'T let your empty equipment lie idle for 1953 Mr. Beekeeper, whether one hive or a hundred, at the price of package bees and queens. For seed crops, farmers need bees for more seed production per acre. Fruit growers need bees for pollination. Our nearest seed-cleaning plant reports—No bees, no seed crop—same for fruit.

WE HAVE TO OFFER YOU—YOUNG HIGHEST PRIME QUALITY PACKAGE BEES AND QUEENS
(Liberal overweight) (Baby Bees, No Drones)

THE IMPROVED STRAIN of three-banded Italians, backed by over 30 years' careful selecting, breeding, and shipping to all points in U. S. A. and Canada. Each year our breeding and mating stock is carefully picked and tested out for the coming season from hundreds of best by test colonies, which gives you benefit of each season's improvement when buying from us.

We are booking orders for the season of 1953, plan your requirements for this season and place your orders early. We are working each day from now on to fill your orders promptly on the day you want them with the very best of **QUALITY BY TEST**. Let us know your 1953 requirements. We guarantee to please you in every respect or money cheerfully refunded. Shipment guaranteed on date you desire. We can take care of your rush orders from April 15th on. No disease. Health certificate with each shipment.

1953 LOW PRICES

Orders booked 25% down payment, to confirm. Balance due 10 days before shipment.

	Queens	2-lb. with queen	3-lb. with queen	4-lb. with queen
1 - 24	\$1.00	\$3.25	\$4.00	\$4.50
25 - 99	.90	3.00	3.80	4.25
100 - up	.85	2.75	3.50	4.00

H. A. FARMER APIARIES

COTTONWOOD, ALA.

Telegraph and Express Office, DOTHAN, ALA.

THE MARSHFIELD MFG. CO. MARSHFIELD WISCONSIN

Is

Looking forward to better opportunities to serve the beekeeping industry in 1953. Your first opportunity is to buy your supplies where you can save money and afford us an opportunity to again serve you in the season ahead.

Write for our 1953 catalog that will be off the press by February 15th. Order your supplies direct from the manufacturer and compare.

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COMPANY, INC.**
MARSHFIELD, WISCONSIN
Apiary Supplies

NEED PACKAGE BEES?

HIGH QUALITY

and

GUARANTEED SATISFACTION

Is

OUR MOTTO FOR '53



Reg. U.S.
Pat. Off.

1953 PRICE LIST

PACKAGES:	1-24	25-99	100-up
2 lb.	\$3.50	\$3.30	\$3.10
3 lb.	4.40	4.20	4.00
4 lb.	5.30	5.10	4.90

QUEENS:	1-24	25-up
Common Stock	\$1.10	\$1.00
Dadant's Starline Hybrids	1.50	1.40
Tested Queens	2.20	2.00

Puett's Special Loose-Queen Package:

Containing a tested queen and her own bees \$5.40

Add twenty-five cents to any package with which you desire a **STARLINE** queen.

Deduct one dollar for **QUEENLESS** Package.

THE PUETT COMPANY

Hahira, Georgia

"Where Satisfaction Is a Certainty"

1953 PRICES for Early Bookings

3-Banded Italian Bees & Queens Check these features:

1. Shipping charges prepaid
2. Guaranteed safe arrival
3. Health certificate with each shipment
4. Queens clipped and painted, if desired, at no extra cost
5. Shipper rated in Dun & Bradstreet
6. No increase in price over last season

1953 PRICES DELIVERED, PREPAID

	Queens (each)	2-lb. & queen	3-lb. & queen	4-lb. & queen	5-lb. & queen
1-24	\$1.10	\$4.00	\$5.00	\$6.00	\$7.00
25-99	1.00	3.75	4.70	5.65	6.60
100-49995	3.50	4.40	5.30	6.20

(For queenless packages deduct price of queen.)

SHIPPED ANYWHERE IN UNITED STATES
AND CANADA.

Terms: One-third upon receipt of order, balance
ten days before shipment.

H. C. BRUNSON

Formerly lessee—Carolina Honey Company

P. O. Box 188

Phone 4641

Hampton, South Carolina

INSIST ON LEAHY BEEHIVES For 1953

- Top Quality
- Prompt Service
- Moderately Priced
- Personalized Attention to Each Order

Our 1953 Catalogue will be ready soon.
Write today for your copy, it is Free.

LEAHY MANUFACTURING CO.

Box 269

HIGGINSVILLE, MISSOURI

ALL AROUND THE BEE YARD

by G. H. Cale

Easter! So let's begin with romance. First, the following by David Bone our pill-roller correspondent (Dr. David Bone) of England:

THE EASTER OF THE BEES

And while they yet believed not for joy, and wondered, he said unto them, Have ye here any meat? And they gave him a piece of a broiled fish, and of an honey-comb. And he took it, and did eat before them.

Saint Luke, XXIV, 41-43

Of't have I watched you at your joyful trade
In hawthorn wood or linden glade,
You daughters of the sun,
And felt,
There musing in melodious shade,
Or in bright air that smelt
Deliciously of May,
The joy of life that in you dwelt—
Joy in your brief to-day.
Such happiness, O bees, your labour yields.

But these
Your sunbright moments which I mark
Were far surpassed in joy when
Syrian bees,
Ranging on murmurous wing Emmaus fields,
And sweating their white wax in
the warm dark,
Built the comb that graced the board
Of your newly risen Lord.
Then on what light unwearied wing
you sped
Over lucid dales outspread,
Over tangled flowers sweet
On burning hill and plain,
For honey for your Lord to eat,
Risen again.

David Bone

Isn't that beautiful? It sets the stage for another season. Perhaps my appreciation of it comes from the first visit to the bees yesterday (March 18). I go with trepidation—will there be dead, messy colonies? Will stores be gone? Will clusters be light? What will the first sight reveal?

But none of these unwanted things

were found. There were, in the bees I looked over, no dead and only a few small clusters. In fact most of the colonies had grown in late winter! This at one time was considered to be impossible. Who had ever heard of bees with brood in winter that produced new bees before winter was over! But—they do—when the colonies in fall are strong, with good queens, and plenty of honey and pollen available to the bees during winter. The last phrase is the most important. I have found colonies dead in spring, but fortunately not robbed out, with honey in seeming abundance still in the combs. But the bees died at the top bars over which they could not pass. Most of the honey left was in side combs which they could not reach. They starved.

Last year in one yard I had thirty-five cases of European foulbrood that developed from package bees. The disease first showed a few cells; then flew like Pegasus through most colonies and, by flow time, what had once been the promise of a nice lot of new colonies had become diseased nucs. About then we heard of terramycin which seemed to be a cure for European so the Pfizer Co. of Brooklyn, sent us some of their trade product, Terracyn, to try. Enough to say that using it in sirup or dusting it on combs in varying amounts, soon caused all signs of the disease to disappear.

I have just examined all these colonies. So far (and I know it is early yet to be sure), they show no signs of European. The brood is solid; the colonies are growing rapidly. What a dash, if later, they are all shattered with the disease. Here's hoping.

The first day in bee work puts one in bed with the backache and several long yawns. Yesterday was cold but, for the most part, sunny. Coats were on, later to be taken off; then, with rising wind, put on once more. Come June you can lie on a

blanket at noon, and with a sly look around for prying eyes, strip to the waist for a nice nap after lunch.

Occasionally, if you are like me, you just can't eat. Seems you must do what you have to do. You don't want to stop. That happened to me yesterday without my being aware of it. When I reached home, my wife asked me why I had not taken a lunch. Didn't think of it. Why had I not bought a sandwich. Didn't think of it. "Well, of all things! I'll bet you are about half-starved." I admit I was but I felt fine. Why worry about such a trivial thing as something to eat. I did dig into some of last year's honey and had a few bites!

As the bees grow and the work goes on, one begins to speculate about the season's crop. Will there be one? Who knows. It can be so dry that nectar is scant; true of some honey plants, but not of others. One drought year, sweet clover yielded so well that the season had to go on record as a top one. So hot during the flow, we slept in the bee yard. Also, maybe the flow time will be so wet or so cold or so something else—Some folks call me a pessimist!

Yesterday showed me all the things I did not do last year. Most of what I did not do concerns equipment. I learned of a man lately who had fine, painted bee equipment who sold to a low bidder. I have some old and poorly painted equipment. I see nails pulled by weather, tops with cracks, bottoms—oh, bottoms. But so far I have been in the bee business fifty years. Maybe this year I'll paint, repair, replace, and buy a yard mower. If the crop I want comes, likely I'll still have decrepit equipment next year.

Don't think all of it is decrepit. Just some of it—some is gleaming like a new automobile!

SILVER DOLLARS FOR



The Honey Institute's Silver Anniversary

WE IN THE BEE INDUSTRY SEEK YOUR CONTINUED COOPERATION



For a quarter of a century now, our American Honey Institute has continuously performed an invaluable service to the bee industry publicizing honey at a minimum of cost to us.

It has conducted its activities on such a high plane that its prestige and position throughout the nation command the respect of not only the honey industry but of the professional field and of the large national manufacturers and distributors of other food products. Translated into dollars and cents, this promotion is worth many millions of dollars. Such meritorious work must continue—and with modest contributions from beekeepers, processors, and merchandisers alike.

It is fitting then, that on this silver anniversary, all of us back the Institute. Why not—right now—send a special extra **BIRTHDAY GIFT**. It will be turned into silver dollars for presentation to the Institute in recognition of this eventful occasion.

Board of Directors
American Honey Institute
Madison, Wisconsin

R. F. Remer, Chairman	
M. J. Deyell	Woodrow Miller
T. E. Burleson	Roland C. Stone
L. C. Dadant	R. B. Willson
Gordon G. Frater	A. B. C. Woodman

Starline

SUNKIST

Italian

We are not in a position to judge what others may have to offer, but WE KNOW we have top quality queens and package bees. Your choice of two outstanding lines—Dadant's Starline Hybrids and Sunkist Italians:



Prices on Italian queens and packages:

Italian Queens				Starline Queens			
1-24	\$1.20	2-lb. \$3.50	3-lb. \$4.50	4-lb. \$5.50	1-24	\$1.50	Packages with
25-99	1.10	3.25	4.25	5.25	25-99	1.40	Starline queens add
100-up	1.00	3.00	4.00	5.00	99-up	1.30	30c per package.

Packages with
Starline queens add
30c per package.

SUNKIST BEE COMPANY

CONVENT, LA.

BETTER BRED QUEENS — THREE-BANDED ITALIANS

IT'S HERE and we are ready with our "Better Bred Queens" and plenty of bees. Send us those early April orders. We can make shipment promptly starting April 1st. Our "Better Bred Stock" is backed by more than a quarter of a century of continuous improvement. They are as good as money can buy. Order direct from this ad at the following prices:

		Queens	2-lb. w/q	3-lb. w/q
1 to 18		\$1.15	\$3.25	\$4.15
18 to 99		1.05	3.10	4.05
99 or more		1.00	3.00	4.00

CALVERT APIARIES

Calvert, Ala.

Advertise in the American Bee Journal

The Honey Bee Improvement Co-op Assn. of Ohio

has moved its bees and equipment south and we will produce queens under contract.

The bees we offer were developed on Kelleys Island, Ohio, through Government assistance and will hereafter be known as Island Hybrids.

Orders should be addressed to us and placed as early as possible since many dates are booked to capacity.

	1 to 25	26 up
2-lb. bees with Hybrid queen	\$3.50 each	3.25 each
3-lb. bees with Hybrid queen	4.50 each	4.25 each
Hybrid queens	1.50 each	1.40 each

Regular queens deduct 25c from above prices per package.

"They Produce"

ROSSMAN APIARIES

P. O. Box 133

Moultrie, Ga.

Three-Band Italian Package BEES AND QUEENS

and Pure Italian Three-way D. R.
Queens



Full weight, prompt shipment. Young bees. State health certificate with each shipment. Live arrival guaranteed.

Replacement or refund made promptly upon receipt of bad order from your express agent.

1953 PRICES WITH YOUNG LAYING QUEENS

Lots of	2-lb.	3-lb.	4-lb.	5-lb.
1 to 29	\$3.25	\$4.00	\$4.75	\$5.50
30 to 100	3.00	3.75	4.50	5.25
100 up, each	2.80	3.50	4.25	5.00

Tested queens \$2.00 each.

Untested queens \$1.00 each.

For introduced queen add \$1.00 per package. If queenless bees are wanted deduct \$1.00 from the package price.

JACKSON APIARIES

Funston, Georgia, U. S. A.

HONEY WANTED

Bryant & Sawyer

2225 Hunter St., Los Angeles 21

WILLIAMS ITALIAN QUEENS

Large Leather-Colored Three-Banded

QUALITY SUPREME

Certificate with each shipment

1-9 Postpaid 85c

10-99 Postpaid 75c

100 up Postpaid 70c

Hubam Clover Honey for Sale

DR. WILLIAMS APIARIES

303 W. Delee St. Baytown, Texas

ITALIAN

PACKAGE BEES and QUEENS

John S. Shackelford

Rio Oso, California

STOLLER'S

FRAMESPACERS

The finest thing ever offered beekeepers. See your dealer or write.

STOLLER HONEY FARMS

Latty, Ohio

Italian Bees and Queens

2-lb. pkg. with queen	1.24	25-up
3-lb. pkg. with queen	\$3.00	\$2.80
4-lb. pkg. with queen	3.80	3.45
5-lb. pkg. with queen	4.60	4.35
5-lb. pkg. with queen	5.40	5.15

Extra queens, 85c

Live delivery guaranteed and health certificate. 10% books your order, balance 10 days before shipping.

GASPARD BEE CO.

Hessmer, La.

PACKAGE

Bees and Queens

For Quality and Service

C. F. Koehnert & Sons

Glenn, Calif.

ITALIAN BEES AND QUEENS

2-lb. package with queen	\$2.75
3-lb. package with queen	3.50
Queens (postpaid)	.80

Satisfaction and live delivery guaranteed. Health certificate with each shipment.

BAYOU BEE CO.

Rt. 1 Box 49 Montegut, La.

Package Bees and Queens

Our Mott Strain of Bright Three-Banded Italians Free from Nosema.

Queens 2-lb.	3-lb.	4-lb.	5-lb.
1 to 50 \$1.00	\$3.25	\$4.25	\$5.25
50 Up .90	3.00	4.00	5.00

Safe Delivery Guaranteed.

TAYLOR APIARIES

Box 249 Luverne, Ala.

A CONSTANT MARKET FOR YOUR BEESWAX

DADANT'S, Hamilton, Illinois

QUEENS and PACKAGE BEES

For spring delivery, April 15 to July 1

at the following prices:



Queens	Italians	Packages w.q.	Starline Queens
1-9 \$1.25	2-lb. \$3.75	3-lb. \$4.75	4-lb. \$5.75
10-99 1.25	3-lb. 3.50	4-lb. 4.50	5-lb. 5.50
100 up 1.25	3-lb. 3.25	4-lb. 4.25	5-lb. 5.25

Add 25c for packages with Dadant's Starline Hybrid queens. After July 1, Italian queens \$1.00 each, Starline queens \$1.25 each.

We guarantee safe arrival, health certificate and prompt service. Our queens are reared under my personal supervision, our aim is

QUALITY NOT QUANTITY

LITTLE'S APIARIES Box 122 Shelbyville, Tennessee

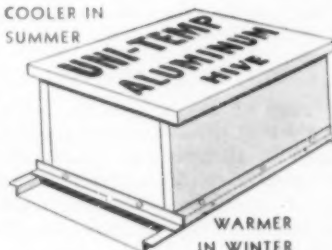
A trial will convince you—A-B-J ads produce results

We don't say the UNI-TEMP is Better . . . We say the UNI-TEMP is BEST

We can make this unqualified statement because we can back it up to the last wooden bottom-board.

We have friends who make and sell wooden hives. We ourselves sell wooden hives. But that doesn't stop us from telling you the truth, that the UNI-TEMP ALUMINUM HIVE is by all odds the BEST Hive on the market today.

COOLER IN
SUMMER



WARMER
IN WINTER

We are preparing a patent application because we don't believe anybody can invent a better aluminum hive that would have UNI-TEMP's simplicity of construction, rugged strength, knockdown feature, interchangeability, and all the other requirements of a suitable home for the bees.

Friends, remember it's YOUR MONEY you're spending to replace short-lived wooden hives—and YOUR BACK that needlessly lifts 2½ times more weight—and YOUR TIME that is needlessly spent painting and repainting, assembling, repairing, and fighting rot, termites, and all the natural enemies of wood—and YOUR BEES that work their hearts out trying to cool wooden hives under blistering summer sunlight. If you PREFER that kind of deal, we'll be glad to sell you all the wooden hives you need—and at very attractive prices, too! (Catalog free.)

DEALERS! Up to now we have not solicited dealer inquiries on UNI-TEMP equipment. However, more and more dealers are writing in, asking for dealerships. Many of our customers are asking if they can buy UNI-TEMP Hives locally. Therefore, we have decided to offer protected territories to reliable dealers. At this writing most territories are open. Write at once and get our plan. Please state territory you can service efficiently (name counties).

Special Introductory Offer

During April only, with each complete UNI-TEMP ALUMINUM HIVE ordered at \$12.75 f.o.b. Hapeville, Ga. (shipping wgt., 12 lbs.), we offer a 2-lb. package of Italian bees and queen (our regular price \$3.75) at only \$2.90 f.o.b. our South Carolina yard. (DEALERS: This offer valid on your orders, plus usual dealer discount.) See your dealer or mail the coupon below.

The A. H. HALE CO., Hapeville, Georgia

ABJ-4-53

Ship complete UNI-TEMP ALUMINUM HIVES at \$12.75 each f.o.b.

Hapeville, Ga., and 2-lb. packages Italian bees and queen at \$2.90 each

f.o.b. South Carolina yard. I enclose \$ Ship bees

1953.

Name Address

State Your Dealer's Name

(NOTE: Show Express station if different from post office. We reserve right to ship bees at later date if already booked full on preferred date.)

Keep Them Flying!

by Walter F. Straub

The author of this timely article on honey promotion is president of W. F. Straub & Company which markets honey and honey products, and also president of Tanquary Honey Farms, Inc., producers of package bees. He served during World War II as Director of Food Rationing. Mr. Straub eats honey every day, as does his family, believing you can do a better job if you practice what you preach!

IF ALL of us get together again next Fall, after our 1952 baptism into an All-American Honey Promoting Crusade, we certainly won't have to worry about keeping those bees flying. They will have to put in overtime!

Some of us who have been proclaiming the virtues of honey in newspapers and magazines and over the radio for many, many years would naturally not expect as great an impact from last October's drive, as perhaps the packer or distributor who does no advertising of his own brand. However, we were pleasantly surprised—we enjoyed a substantial increase in sales, a sales increase greater proportionately over 1951 than 1951 showed over 1950, and we heard more talk about honey among important grocerymen than

at any other time in our history in the business—with the possible exception of the war days. So, while we are steady advertisers of our brand of honey and will continue to be steady advertisers to the consumer, yet we are keenly interested in seeing this All-American Honey Crusade repeated in 1953. I believe that with the experience of our first joint effort, we will do far better this fall.

I hope that we can get our good friends in the Department of Agriculture to "spark" another such drive this October, because with one effort behind us, the next will be even more effective. And perhaps when we once get into the swing of actively promoting our honey, we may also get into the habit of keeping it up between these joint drives.

In the steady promotion of honey over a period of years, we have learned the importance of keeping continually at it — of repeating countless times, and in every type of advertising media which we could possibly afford, the appetite appeal and the health value of honey. It is one of the greatest stories that can be told the entire food industry. Telling it, however, costs hundreds of thousands of dollars because newspaper space, prominent national magazines at the rate of \$25,000.00 for a single color page, radio and now television are mighty expensive. Without repeated impacts "in-between-times" the annual October Honey Crusade would be far less effective.

During the 1952 season, for example, LAKE SHORE Honey was advertised in leading metropolitan newspapers, participated in broadcasts over 224 radio stations, and 84 television stations, in addition to a tremendous amount of point-of-sale promotion at the retail level. On top of all that, consumer gifts and premiums were used, and publicity releases on the use of honey in many new and delightful recipes were cir-

Grapefruit and honey made a popular combination during the honey promotion period last fall. (Photo courtesy USDA.)



culated among newspapers and magazines throughout the United States. Demonstrations in many retail stores combining honey and the leading biscuit mix—the famous Bisquick, also helped to create many new users of honey. Thousands of samples of miniature honeycomb glass jars were given to women shoppers in the stores, and delivered directly to the home in certain cities.

Consistent consumer advertising together with packing only a fine quality honey, is helping to lift our industry out of the old rut—the mistaken idea of associating the prosperity of the honey industry with either the scarcity or the high price of sugar. The War years had a particularly bad effect on consumer honey consumption, because so much honey went into industrial uses when sugar was scarce—and also because some packers in their anxiety to supply their customers actually blended in lower grades of honey.

Grocery stores throughout the United States had leftover supplies of this low quality honey, purchased at a time when they could apparently get nothing else, and of course that not only discouraged the retail grocer, but alienated many loyal honey users as well. Although we are rapidly overcoming this wartime throwback—we must, however, be very certain that it never happens again. Our product must be packed and merchandised for its own delightfully delicate flavor, and its beneficial contribution to better health and well being. By combining these essentials with consistent advertising, we will soon place our product among the important foods found in every American home. That is where it rightfully belongs.

Illinois





The farmer and beekeeper (Mr. Wicht at right) shake hands showing cooperation on a pollination project.

Pollination by a Package Bee Producer

by William W. Wicht

LIVE in a section of the country that has a predominant timber industry, small farms and produces no commercial amounts of honey. Under these circumstances one would think the possibilities of receiving pay for pollination services of honey bees would be quite remote. I used to think this myself, but when you consider that the timber is now second growth and that farmers no longer keep a few bees on every farm, the increased yields we are getting leave no room for doubt.

A few years ago the American Beekeeping Federation began to create widespread interest in the pollination field. I too, became interested and naturally began to wonder how I could cash in on this new phase of beekeeping.

At one of our beekeeping meetings I interviewed Dr. James I. Hambleton who is in charge of all research on honey bees by the USDA in this country. After I explained my problem, Dr. Hambleton stated, "Colonies of bees used for the production of package bees should be good colonies for the pollination of farm crops since they devote their entire activities to the gathering of nectar and pollen to rear brood." This I could understand since we have to maintain a large brood count in order to get more pounds of bees per colony than the state's average. Bees gathering pollen make the best pollinators and since the amount of

brood in my package producing colony compares very favorably with that of a honey producing colony, I have a good pollination colony.

Armed with this assurance and information, I definitely had something to sell. My job of selling pollination to growers was not too hard since I had first sold myself.

One of the first things I did was to order a good supply of the booklet "Planned Pollination." These I gave to everyone interested and particularly to farmers on whose places I kept bees and to producers of clover seed. I have made some good contacts through county agents, soil conservation people, and seed dealers and cleaners. It also pays to keep good signs on your trucks. Several people were kind enough to lend me films or movies on bees and I make talks before any group including civic clubs, farmers, or any-

one who will listen to me talk about bees. This is standard practice and I have kept this up until now I have all of my outyards on pollination.

True, there are times when I cannot get as good terms as I would like to have but at least I am on my way. I've been paying these fellows and now the shoe is on the other foot. The first consideration on my part is that the grower I am dealing with be honest. If the grower is not willing to pay a cash rental he can usually be talked into sharing a part of the increase in seed. After he sees how much you make this way, then he wants to pay rent for your bees. It is possible for the beekeeper to collect from the same grower to whom he has been paying rent for years, because I have done just that and have not moved a single colony to do it.

Mississippi

Bill Wicht points out the difference in yield in two bags of crimson clover seed, the one on the left being the crop from a field with bees and the other from a field without them. In the background is a seed cleaner. (Photos courtesy Hattiesburg American.)



A One-Man Hive Hoist

by Chas. S. Hofmann

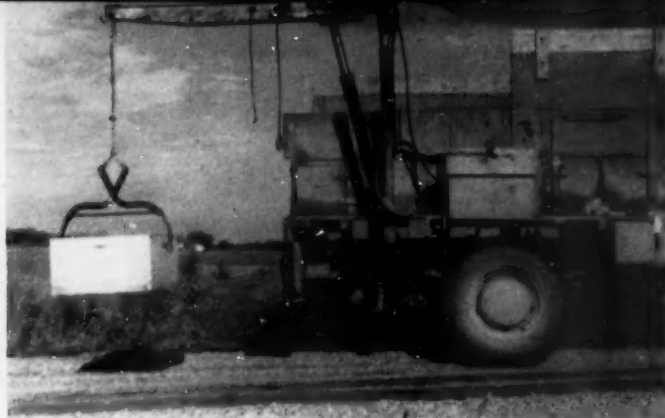


Fig. 1. This hive hoist is a boon to the beekeeper who works alone, as loads up to 200 pounds can be managed by one man. This view shows the mast and boom which can be raised and lowered and turned. With an electric motor for power, the hoist can be operated by a push-button switch.

A LONG time ago some character came up with the wise deduction that necessity is the mother of invention. If he had been a present-day beekeeper he might well have realized that necessity can be prodded by desperation. The present labor shortage and low returns from beekeeping have driven many of us into deep thought hoping for ideas that might not only be

a convenience to us but might in many cases play a large role in keeping us in business.

I operate in the 300-400 colony range which, of necessity, must now be termed strictly a one-man outfit (a one-man outfit is where there is never anyone to take hold of the other end of anything). Hauling a few loads of bees alone in the fall of 1950 convinced me that I would

have to find some kind of mechanical help for handling the freight.

After much thought and sifting of ideas, I arrived at the device pictured and decided to risk the estimated \$200.00 or more to construct it. This is a simple hoist consisting of a mast and boom, the boom or arm being raised and lowered by a hydraulic ram and the mast being mounted in a bearing that allows the hoist to turn at its base in a 359 degree circle (the oil hoses prevent hoist from being turned clear around). The hydraulic pump that supplies the oil pressure to the ram is powered by a regular six volt electric starter motor. This motor in turn gets its "juice" from the truck battery. Using an electric motor for power allows the hoist to be operated by a push-button switch on the end of an extension cord and provides the versatility that makes the outfit practical. This cord runs from the motor up the mast and out along the boom or hoist arm to about the half-way point, where about two feet of the cord is allowed to hang free so that it is always in easy reach of the operator (see pictures). When the push-button switch is depressed the hoist arm begins raising instantly, and when the switch is released it stops and holds the position. Since the hoist arm is lowered by opening a release valve in the oil line, this is also located on the boom for easy access. A short rod welded to the valve wheel makes it easier to open and close the valve ($\frac{1}{4}$ to $\frac{3}{4}$ turn is enough) and also makes it possible to open the valve by pulling a cord when it is otherwise out of reach. Thus when the lifting tongs are placed on a colony of bees one hand guides the colony while the other hand operates the hoist controls.

Total cost of the hoist was \$180.00

Fig. 2. Use of the hoist in loading honey. Lifting tong is snapped on the super as it is loosened with two hive tools.



Fig. 3. When the super is cracked, the loose switch button is pushed to raise super a few inches. One hand then moves it aside while other hand moves acid cloth down to next super.





Fig. 4—Next, one hand guides super around to truck while the other hand keeps switch button depressed so that when the super is swung into the truck it is high enough to be placed on the stack.

Fig. 5. Right—Putting the super on top. This one weighed about 130 pounds. Truck is low and step on end gate makes it simple to get in and out. Any stack on truck can be reached. Right hand changes from switch to release valve to lower super as it is pushed in place.

Fig. 6—Bees can be unloaded without getting off the truck—usually four at a time; then the truck is driven ahead for the next four.

Fig. 7—This view shows how bees can be loaded or unloaded from any stack in the truck.



and total weight (including all parts, even truck bed pieces) does not exceed 175 pounds. I tried in every way to keep the weight down on this and still design it for lifts up to 200 pounds.

Bee yards must necessarily be laid out so that the truck can be driven along each row or between rows, but great accuracy of driving is not necessary since two or three feet of leeway is allowable and it is only necessary to drive up for each four colonies. In loading bees, as soon as the colony being lifted is off the ground, the operator can begin swinging it around to the truck and speed of lift is such that when the colony reaches the back of the truck it is high enough to go in. For loading honey a spring is placed across the tongs to hold them "shut." This holds the tongs on the super while it is being pried loose (Fig. 2). For loading bees the spring is reversed to hold the tongs open. This allows the operator to unload without getting off the truck (Fig. 6) as the tongs will release as soon as the colony touches the ground. Sometimes it is convenient or necessary to shorten the chain holding the tongs, and this can be done quickly by hooking either of two rings on the chain to an extra hook on the end of the hoist arm.

Tapered roller bearings allow almost effortless turning of the hoist even with a load, and uneven ground is no particular problem. When loading steadily, the truck motor is run at idling speed to supply some of the electricity used, but the truck battery holds up surprisingly well and I don't believe there is more than about 20 per cent reduction in its normal life.

Whenever help is available (your wife can do this) for hauling bees,

Fig. 6



Fig. 7



one person can stay in the truck while the other places the tongs on the hives and drives up for each four colonies. This makes easy work out of an otherwise hard job and only the hoist knows which colonies are the heavy ones.

After using this hoist two full seasons, I am convinced it has paid for itself. It has loaded and unloaded the equivalent of over 700 colonies of bees and loaded about 110,000

pounds of honey. The original construction has proved sound and it has been very foolproof. No part of it has given a moment's trouble—even the oil hoses have taken all the turning in stride with no apparent damage. The tongs never damage or even mark a hive, and the hoist handles colonies of bees and supers of honey more gently than in most cases can be done by hand.

Minnesota

Twenty-Five Years of Service

American Honey Institute
Madison 3, Wisconsin

MARCH 28 was the most important date on the beekeeper's 1953 calendar. For that was the date which marked the twenty-fifth anniversary of the founding of the American Honey Institute.

No beekeeper who can remember back to pre-Institute days will doubt the significance of the Institute's twenty-five years of service to the American beekeeping industry. Even those of us who are "babies" of the industry—perhaps we have only been keeping bees since the end of the war—cannot help seeing the immense gains the industry has made in the field of product promotion.

Why? That answer is one everybody knows. Because of the efforts of the American Honey Institute for twenty-five consecutive years the honey industry has grown from a toddling infant to a strong contender for the public's food dollar.

Yes, it was twenty-five years ago in March, 1928, that the American Honey Institute originated. The idea sounded like a good one. Here was a chance to promote honey by working with another food industry. Leaders in the honey industry met in Chicago. It was at this Chicago meeting that the American Honey Institute was born.

What was the purpose of creating such an Institute? Why go to such trouble and expense? Would such an organization be well received by the beekeepers it was to serve? Shall we gamble and start such an Institute? Such were the questions that ran through the minds of those foresighted men who laid the foundations of the American Honey Institute. But being men of fortitude and courage, they decided to give the "Institute Idea" a try.

And only one try was needed to convince American beekeepers that the "Institute Idea" was the exact remedy for the ailing honey industry. After the Institute was incorporated as a non-profit organization, after the wheels of its machinery were oiled with a little experience and a vast amount of daring, after it was reorganized in 1938, the American Honey Institute burst out

of the cocoon stage of development into the full-blown adulthood of a successful honey promoter.

The Board of Directors to this day stress the fact that the Institute, even twenty-five years after its founding, is in a constant state of flux, of change, of development. They point out that the American Honey Institute was founded on the "Institute Idea," the idea of making America's potential honey market an actual one, and that in order to keep this idea alive and vital the American Honey Institute must be ready and willing to accept new changes in the complexion of American life.

Unlike many executives who jealously refuse to tell how or why they have made a go of it, Mrs. Grace openly declares the secret of success. "The amazing success of the American Honey Institute," she says with a wise shake of her head, "is due to devotion to the four E's—Economy, Efficiency, Effort and Excellence."

From the start, the Board of Directors of the Institute recognized the limitations of their organization. They knew that funds would be short compared with other food industries. Yet they were convinced that honey must be promoted, advertised, in order to get its cut of the American food dollar.

There was only one solution to such a problem—honey's promotional funds would have to be used soundly, wisely, with the greatest economy. Throughout the past twenty-five years the Institute has followed this axiom of economy closely. Every activity is minutely examined for ragged edges that eat up funds. It is pared down to its essential core. As one past government official so aptly phrased it, "We have peeled off the fat and left only the muscle." Twenty-five years of this type of operation has made beekeepers confident that the money they invest in the Institute will be wisely spent.

It follows, then, that to operate economically you must operate efficiently. This second of the four E's—Efficiency—is indeed one of the

master keys that unlocks the door to Institute successes.

Each employee of the Institute must know what is expected of him, must know his job, must know how to perform this job well. Each recipe leaflet that is printed contains no waste space, no waste wordage that is not essential to the value of the leaflet. Time is considered a commodity to be used to the Institute's best advantage. This is the way Efficiency is spelled at the American Honey Institute.

Without Effort all would be lost. But the Institute realizes that it is not only the effort made by those closely connected with the Institute that is important. Effort must also be made by every beekeeper, every man who wants to call himself a part of the honey industry. That is why the American Honey Institute concentrates on pulling the beekeepers together into one union; that is why the membership drives staged by the Institute are not merely to add names to the Institute roll call but—more important—to urge beekeepers to make an effort to promote honey on a large scale. Individual effort multiplied a thousand-fold adds up to a total no amount of high finance can reach.

You might as well throw all the Economy, Efficiency, and Effort you can muster out the window, however, unless you gauge them by a standard of service. The standard of the American Honey Institute allows no compromise—it is Excellence. Every news release is written and re-written, every honey recipe tested and re-tested, every letter of correspondence viewed and reviewed, until it is concise and letter-perfect. It is as if the Institute wanted to stamp a gold-engraved Seal of Excellence upon every piece of work.

The secret formula for our twenty-five years of service to the honey industry is wrapped up in the four little words, Economy, Efficiency, Effort, and Excellence. These are the keywords that have brought us to our 25th anniversary. They are the words that will usher us to our golden anniversary twenty-five years from now.

Cornell Producers' Meeting . . .

Honey packing problems, from the hot-room to the filling machine, were some of the major subjects discussed by the 15 Canadian and American beekeepers who attended an informal producers' meeting at Cornell University, January 21 and 22. Commercial beekeepers, apiary specialists and advanced students took part in the program.

Ways to remove wax particles from extracted honey aroused considerable interest at the opening session. The introduction of the automatic Bogenenschutz uncapper has focused attention on this problem.

Many beekeepers using this uncapper have failed to gear their warming, settling and straining equipment to the increased volume of uncapped honey. Dr. E. J. Dyce, professor of apiculture at Cornell, told the visiting beekeepers. Old-fashioned honey handling methods still employed by some beekeepers using this labor-saver are unable to cope with the problem of removing wax particles from the extracted honey, he added.

A large hot room, to warm the combs, should be the first step in the honey house if uncapping is to be handled efficiently and rapidly, the specialist reported. He recommended the use of a large sump with a baffle to provide a continuous supply of honey to the remainder of the clarification system. Much larger settling tanks and strainers are necessary.

"It is often necessary to warm the honey again after it passes through the sump," said Dr. W. L. Coggeshall, Extension apiarist. "This will permit more rapid settling and straining," the specialist explained.

Color slides illustrating modern trends in honey houses and packing equipment were shown. Roger Morse, Walter Barth, and Herbert Pallesen, advanced beekeeping students at Cornell, also attended the sessions that climaxed with a discussion on extracted and comb honey management.

Wilbur Wahl of Clayton, New York, a commercial apiarist, led the tour of Canadian visitors through the Finger Lakes Honey Producers Coop. at Groton, and finally to Ithaca. The Ontario beekeepers included E. Braun, Ottawa; H. C. Harris, Alliston; H. G. Toop, Arnprior; R. W. Maguire and R. C. Maguire, Minesing; D. C. Culham, Collingwood; V. D. Mesley, North Gower; and K. N. Wells, Canadian author from Coldwater.

Walter Barth, Assistant
News Bureau
Cornell University, Ithaca, N. Y.

Miscellaneous Seed Crops . . .

The U.S.D.A. annual report, just issued, shows that white clover seed production in 1952 is only slightly below 1951, the total being 6 million pounds. Idaho leads production with nearly half of the total. Louisiana, Mississippi and Alabama follow, with Wisconsin a weak fifth.

In ladino production of 12 million pounds, California accounts for 8 million pounds with Oregon second with three million. Other notable producers are Idaho, Oregon and Montana.

Oklahoma leads in hairy vetch production with 28 million pounds out of a total of 64 million for the whole country. Oregon ranks second with 20 million pounds. Texas, Arkansas and Washington rank next in order.

The production of mustard seed has dropped from 19 million pounds in 1951 to 13 million in 1952. Montana is the big producer of this seed with California ranking a poor second.



Dr. E. J. Dyce of Cornell shows E. Braun (left) of Ottawa and Wilbur Wahl of Clayton, N. Y., an in-line dairy strainer modified for use with honey.



Dr. E. J. Dyce (center) shows a copy of a foreign beekeeping magazine to visiting apiarists. Left to right, front row: Dr. W. L. Coggeshall, extension apiarist; E. Braun, Ottawa, Ont.; E. W. Maguire, Minesing, Ont.; Dr. Dyce; and Wilbur Wahl, Clayton, N. Y. Left to right, back row: Roger Morse, Sangerites, N. Y.; H. G. Toop, Arnprior, Ont.; H. C. Harris, Alliston, Ont.; K. N. Wells, Coldwater, Ont.; Herbert Pallesen, Brooklyn, N. Y.; and V. D. Mesley, North Gower, Ont.



Dr. G. S. Garrison, Division of Forage Crops and Diseases, U.S.D.A., Beltsville, Maryland (left); Theodore Dumas, Woodland, California, beekeeper and legume seed grower (center); and Dr. Frank Parsons, specialist in agronomy in the University of California and Secretary-Treasurer of the California Crop Improvement Association. Prominent at the meeting of the American Beekeeping Federation at San Jose.
(Photo courtesy J. E. Eckert, California.)

Another Honey Crushed Bread

That efficient comb honey producer, Carl Killion has been pushing efforts to get a special high content wheat bread on the general markets. It is out now with the brand of "Toastmaster." Their literature says, "same ol' honey in a new dress."

Beekeeping Fairs . . .

The International Honey Fair was held in Antwerp in July, Scottish National Fair was in September, British National fair was in October and the Royal South African Fair has just been held. Canada is to have its Royal Winter Fair at Toronto November 14 to 22. The United States lags behind with no beekeeping fairs on a national scale.

Ralph Carter Lawson Passes

Ralph Carter Lawson, Iowa beekeeper, was born August 21, 1898 and passed away on February 5, 1953. Last rites were held at the Weston Behner home in Fairfield, conducted by his pastor, Dr. Howard Irvin. Mr. Lawson was affiliated with the Presbyterian church of Birmingham, Iowa. He was a good beekeeper in every sense of the word and was well liked by everyone who knew him. He kept about one hundred colonies of bees which were reduced in the last two years to about fifty due to ill health.

J. W. Stine, Fairfield, Iowa

Honey for Breakfast

Week—April 5-11 . . .

Honey for Breakfast Week, sponsored by American Honey Institute, starts on Easter Sunday morning. This is a good period in which to boost the sale of your honey. Write to American Honey Institute, Madison 3, Wisconsin, for suggestions and samples of material.

Red Feather in April . . .

This is the month for Red Feather support and participation for National Travelers' Aid, which serves the public in bus, rail, and air terminals. (Contact Francis Allen, 425 4th Ave., New York.) Also for USO programs, sponsored by the Y's, National Catholic Community Service, and Salvation Army, that will bring opportunities to the boys in the armed forces for religious service at Easter. (Contact Harold Shore, 500 Fifth Ave., New York.) Also Boys' Club Week, sponsored by Rotary, Kiwanis, Lions, Exchange clubs, vet-

erans organizations and labor unions. (Contact Howard Tooley, Boys' Clubs of America, 381 Fourth Ave., New York.) Do you have clothes to spare to send to Korea? Blankets and coats are needed for the American Relief for Korea. Each community is supposed to have its own clothing campaign. (Contact Howard Whitford, 133 E. 39th St., New York.)

This month also has a YWCA week, and a National Social Hygiene Day. (YWCA—Mollie Sullivan, 600 Lexington Ave., New York; Social Hygiene, Harriet Scantland, 1790 Broadway, New York.)

Athletes on Endurance Tests Find Honey Aids Efforts

Athletes fed honey during rest periods between sessions of hard physical activity were able to sustain effort better than those performing the same test without honey feeding.

In the tests, the athletes were given emphasized Harvard Tests up and down from an 18 inch platform for periods of 10 minutes. Rest intervals of 15 minutes were allowed after each work session.

Two groups performed in the tests. In group A the athletes were given one-half teaspoonful of honey during the rest periods. In group B the athletes were given no energy food of any kind. The performances of each group after the tests:

The group on honey feeding appeared better able to sustain an effort rhythm (one step per second) and in every case but one were able to continue longer (more 10 minute work sessions). In the case in which the athlete was not able to sustain the group level his failure was apparently due to a muscle cramp in the knee area.

After the tests, the recovery of each athlete was checked and those in the group fed honey all appeared to regain energy more quickly. They reported less fatigue and were "ready for more work" much sooner than those who had not been given honey.

During the tests it was noted that there seemed little difference in the performance levels until three work sessions had been conducted. At this point the athletes not being fed honey seemed to tire more easily in each work session and did not recover in the rest session as efficiently as those who took honey feeding at this time. This situation grew

more apparent as the tests continued.

In later tests, when the two groups were revised, the group given honey not only improved on their first performance (when they did not take honey feeding) but showed better group performance than did the group who had a better standard in the first tests.

Conducted in order to test the value of honey as an energy food for athletes and to measure the value of energy food feeding during rest intervals in physical activity, the tests indicated both that honey is an ideal energy food for athletes and that energy feeding during rest periods apparently helps the athlete sustain a higher degree of effort in continued work.

Reprinted from Sports College Research Guide, Toronto, Ontario, October, 1952, page 4.

Promoted . . .

Dr. V. G. Milum of the University of Illinois was promoted to a full professorship last year. Congratulations, Dr. Milum. The Milums took an extensive trip to California and surrounding states last summer. He is quite active as a speaker and moderator in the beekeeping association. During the recent Farm and Home Week, he led a program on apiculture. He is at present interested in the grooming invitation dance and the DVAV or spiritual tap dance of bees.

A White Clover Brand . . .

A very interesting booklet comes from the Ala-Lu Clover growers of Thompson, Ala., who are interested in raising seed of this special white clover—"A clover for year round grazing."

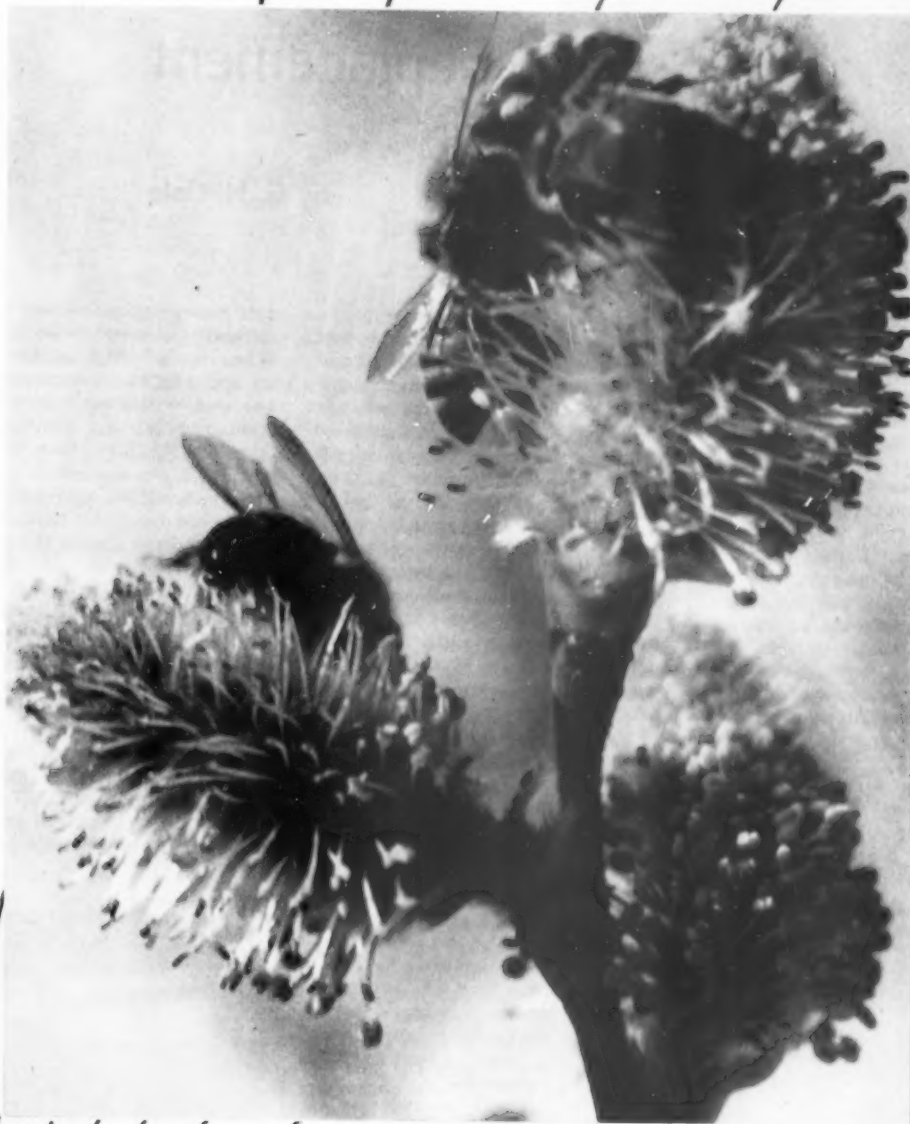
Ala-Lu has found that honey bees do play a very important part in cross pollination of clover and they have been able to obtain as high as 3 to 4 bushels of seed per acre with the aid of honey bees. All their member growers are encouraged to make full use of honey bees to obtain proper coverage.

Suit Settled . . .

"Revue Francaise d'Apiculture" reports in its January issue the final disposition of a suit by French beekeepers against spreaders of insecticides for damage done to honey bees. The case which had been in litigation four years was decided in favor of the beekeepers.

April

SPOTLIGHT



Increase and Replacement



Package Bees for Increase or Replacement

by G. H. Cale

THE use of package bees for increase or to replace losses is the most common way to accomplish either purpose. Any person, with enough knowledge about beekeeping, and with sufficient capital, could easily become a thousand colony beekeeper in a season or two. With the equipment ready and bees hived, the rest is up to the individual and the season. Before the advent of package shipments such an achievement was impossible.

Because of the ease of obtaining packages and the relatively small amount of time required for handling them, beekeepers who have the funds to expend for packages will continue to depend on them whenever they want to expand operations or when they have above normal losses to replace.

Many operators figure on a ten to twenty per cent annual loss and order enough packages for early

spring delivery as a regular part of their seasonal management. Once having determined on a satisfactory source, improved arrangements often make it possible to work with the package producer for stock improvement, dependable early shipping dates, type and kind of shipment, and other improvements in the "partnership" that springs up between the buyer and the producer.

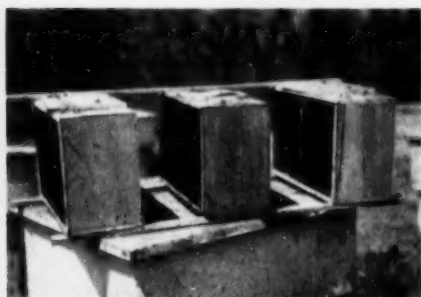
Many "go south" to help with the job, bringing back their bees just as they want them. Some try to set up their own package outfit but this is not attempted as much as it once was.

In determining the total packages required, the following are considered: colonies discarded in fall as not fit to winter, drone layers, and weak, queenless colonies in spring, the number estimated from year-by-year experience, as well as the average winter loss. It might be well here to note that, with the relatively mild winters that have prevailed in the past few years, the actual winter loss of bees is likely to be due to starvation because of insufficient stores for winter or because of poorly placed stores which are inaccessible to the bees when available stores are exhausted.

How to manage packages is another matter. The best results in getting a producing colony from a package come by hiving the package on drawn combs, with consider-

able honey and pollen and doing this as early as possible in the spring. When the growing colony has been on the way about a month, adding one or two combs of emerging bees from other strong, healthy colonies climaxes the job. You have done about all you can do.

Here are two more suggestions. Shake four-pound packages from your own bees toward the end of the summer flow. Install them like spring packages with your own or purchased queens and let them grow to winter. See that they have enough winter stores and in spring there they are on hand. Or take advantage of the lower prices for packages with queens that prevail in summer and install purchased packages then so they will grow up by fall with stores enough for winter. In spring they, too, will be on hand when needed as increase or replacement.



Upper left, packages as received, wood strapping partly removed. Lower left, single package and pail of feed always used at installation. Note grass plug in flight hole; green grass that soon dries and allows flight slowly.

Upper right, water is better than syrup for installation. Wet bees thoroughly. A brush and pail can be used instead of a sprayer. Combs in hive are separated so bees can be emptied between and combs pushed together. Partly emptied cage is then set inside. Lower right, bees all in, ready for feed shell and feed; then the cover.



Winter Loss and Increase

by Lee Roy Stewart



WE used to make up our winter loss and increase by purchasing package bees from the South. But since it takes 100 pounds of honey, and we didn't always get the honey, to pay for an average honey producing package of bees it behooved us to do something else if we wanted to eat regularly. Our queen-rearing nucleus, which you have read of before in these columns (March, 1952), was the answer.

This small hive holds five standard frames or four frames and a feeder. The spacing is a little wider than standard in order to allow easy manipulation of frames, as a slight jar can easily cause a young queen to take flight. The bottom board is nailed to the hive and has a screened hole for ventilation when the hive is closed. Bottom ventilation prevents the nuisance of snooping robbers.

These nuclei are established about swarming time or whenever you have brood and bees to spare. A frame of hatching bees, one of pollen and honey, two empty or partially filled black combs and a feeder

are placed in each hive. Plenty of bees of all ages are shaken into the nucleus as some will drift back if left in the same yard. We close the nucleus by stuffing some green grass in the one bee entrance; by the time the grass is removed the bees will stay put. We queen these nuclei with either good swarm cells, grafted cells or young queens from the South. Each yard has from 10 to 20 per cent as many nuclei as regular colonies, depending upon anticipated needs.

During the season, the nuclei are used to supply needed queens, frames of brood to boost weak colonies and even for the storage of feed for colonies short on stores. We also use them for repositories of cull combs we are always weeding out. When the queen is removed, we give them a cell or a queen from the South and if neither are available we let them rear one of their own. When we need a queen we usually unite the nucleus to the colony to be requeened and in a few days remove the surplus combs and start another nucleus. If properly cared for, it will be necessary to remove frames of brood from the nucleus during the season to relieve congestion. We also replace the feeder with an empty frame during the honeyflow.

The important thing in a nucleus' life is plenty of feed. Sugar sirup and unsealed honey or nectar are the best and most stimulating. Sealed honey will keep the nucleus from starving but it is not stimulating enough for the best brood rearing. Don't think that because a honeyflow is on, your nuclei won't need feeding; if they are light in

bees they will starve when your regular colonies are making a surplus. In the latter part of the season our nuclei are forced to the limit. In preparing our bees for winter a nucleus is united to any colony that needs requeening. The nuclei remaining are our winter loss and next year's increase. They are wintered as follows:

An extra rim is added to an inner cover with a one bee entrance in the middle of one side. As an extra flourish we usually tack a little porch under the entrance. The escape hole is screened, top and bottom. Strong two-story colonies are selected for nurse colonies. The regular inner cover on the nurse colony is replaced with our made-over cover, the entrance being placed on the side that will get the most sunshine. An empty hive body is placed on top of this. Then some cool day when the bees are not too active the nucleus' frames and bees are moved from the little hive and set over in the empty hive body over our nurse colony. The nucleus' cluster or brood nest is placed di-



Left: The nucleus hive and feeder.
Right: a side view showing nucleus' private entrance. Joints are taped as it was too late in the season for the bees to seal them.



rectly over the screened escape hole in order to get the heat from the colony below. The nucleus' cluster arrangement should not be broken. Combs of sealed honey are placed on either side. It will be all the better if the frames of honey have small empty spaces at the bottom or small patches of unsealed honey. The remaining empty space in the hive body is filled with combs of honey and pollen and empty black combs. Close the hive and it's ready for winter. We sometimes seal the crack between the top hive and the screened inner cover, which is now a bottom board for our nucleus, with an adhesive cloth tape. The mating hive is returned to our shop and made ready during the

winter for another season.

In early spring we check the nuclei for queens, stores, and so forth. We may lose some of them but shouldn't if they were properly prepared. They are left on the nurse colonies as long as possible or until the danger of chilling is over. When that time arrives we set the nucleus to one side and move the nurse colony to a spot where a colony has been lost. The nucleus is then placed in the nurse colony's former location. In other words, the nurse colony is moved away and the nucleus is lowered. Many of the field bees from the nurse colony will return to their former location which will not only check any swarming tendency but will also add

strength to the nucleus. We also add a frame of sealed or hatching brood to the nucleus and repeat in a week or ten days. This can be taken from any colony that can spare it. The nuclei not needed to replace winter loss are our increase and are handled the same, the nurse colony being removed to any place you want to establish increase. Your nucleus is now a grown-up in your apiary and will produce as much or more than the yard average.

Of course you understand the above method is strictly applicable to those areas where outdoor wintering is practiced and it is obvious it would not be practical in regions where bees are not even wintered.

Indiana

A Repository for Increase and Replacement

by Herbert Studier



EVER since we started beekeeping on a commercial scale in the spring of 1945, we have made all of our own replacements of winter loss as well as increase with nuclei and colonies hauled up from our Pineora, Georgia unit. This operation has been so completely successful that we have grown from 400 colonies in 1945 to our present 1700 colonies. This has necessitated more and more equipment to hold the growing crops from the larger number of colonies.

Our plans are to continue our present method of operation. However, at some time in the future it may be necessary for us to find another method of replacement. The Florida embargo of a few years ago,

scared us as we were afraid Georgia would follow suit. This is still a possibility. Besides, the long trips are strenuous, with the rush to get ready, truck troubles and the usual hazards.

As far back as 1946, I became fascinated with the idea of a repository, bee cellar, or insulated room above ground in which to winter increase or strong nuclei as an alternative plan to buying packages or hauling bees north in the spring.

Perhaps some of these divisions or nucs could be made during the summer, but with the rush of regular work, most of them would have to be made after the rush was over. Divisions made in the fall would not drift as badly and could be made

with little trouble introducing queens; in fact, after most of the brood rearing has stopped queens can be released directly with complete success. Colonies are usually boiling over with bees then, too. Queens are cheap and easy to obtain in the fall.

From a strong heavy colony, otherwise intended for outside wintering, from two to four fair divisions or nucs could be made. If given a young queen and ample stores, these nucs or divisions consisting of about six frames each, could come through the winter in fine shape in a well controlled repository. By wintering a good share of the bees outside as we can in southern Minnesota, and dividing

the rest for wintering in a repository, it seems reasonable that the problem of replacement could be solved. The total resources of repository and outdoor wintered colonies could then be combined and equalized into the regular full scale operation of the previous honey season, or even more.

Although we have not tried this plan, I am certain it would work. We plan to try it in the near future whether we continue to migrate or not.

Here is an interesting sidelight. While some beekeepers frown on the idea of storing queens in cages in strong queenless colonies of young bees, I believe a repository could also

be used to winter a number of such storage colonies, each containing around 50 to 100 young mated queens. The queens as stated before, could be purchased in the fall when readily available and reasonable in price, saving the hectic waiting, telegraphing and disappointments trying to obtain early queens in the spring. Such queens would actually be superior to queens which are sometimes reared under trying conditions in the South in early spring. We actually stored a large number of queens caged from the nuclei in Georgia in May 1952 through the summer and fall and then returned them to Georgia in the fall.

The last of these queens were used

on January 14 this year, and nearly all of them look healthy and are doing good work, seeming none the worse for their long period of confinement. Since the temperatures in a repository would be favorable for loose clusters of bees, good care would be taken of such storage queens. Naturally, there will be some loss of queens, but the difference in price between fall and spring queens would more than offset this loss.

While some of these ideas may be just the opposite of present practice or of what some beemen might consider good practice, I believe a well constructed repository could prove to be a very profitable investment.

Minnesota

Replacement and Increase for the Pollinculturist

by Milton Stricker



This is the second in a series of articles on pollination. The first was "How to Sell Pollination Service" which appeared in our January 1953 issue. Mr. Stricker has more to follow in future issues on the problems of a "pollinculturist."—Ed.

WHAT happened to my bees this year? I didn't get any honey." Or, "My colony died without any reason!" These are the common complaints of a lot of hobbyist beekeepers this year. If time is taken to check with these individuals, the answer can be found easily. In many cases the bees were rented out as pollinators in the early spring then returned to their original locations. The usual manipulation for honey production followed and the results were far from successful.

Demand for pollination and the high prices prevailing in this section for such services have led many an apiarist to rent his bees. Result—many have discovered what the commercial pollinator has known for a long time—moving bees destroys "bee morale." When the colony comes back from its pollination chore, it may look good; its population may be even greater than those colonies that were not moved; but usually the colonies that remained on location gather more honey, get in better shape for winter and winter better than those pollination colonies.

The commercial pollination service recognizes that its service fee must include this morale damage, for a part of the fee must go toward replacing colonies. More new colonies must be started by those in

the pollination business to keep their apiaries in sufficient strength than by any other type of bee business.

Buying packages, nucs or queens, are good ways of making increase, but usually the "pollinculturist" chooses to propagate his own stock which he has bred to withstand the specialized conditions his bees must face. Increase can be made equally well in spring, summer or autumn, but local honeyflows, can either help or hinder, so it would be best to discover which of these three periods best suits one's needs.

If you are planning on early spring pollination, work may be too pressing to allow time for making nucs, but if you have the time, there are several ways of making increase.

Since you want colonies to go to orchards as strong as possible, it would be well to have a reserve yard

that was saved just for making increase. These colonies can be split or manipulated by your favorite method. Increase can be made by taking brood away from some, placing queens with this brood, and closing the entrance with green grass to allow the small nuc to become acclimated to its new surroundings without too many bees drifting homeward. This also keeps robbing at a minimum.

If you are fortunate enough to rent all of your bees, thus leaving no reserve yard, certain stronger than average colonies will offer some increase without damaging their pollination potentiality. Here is where stock that builds up rapidly in the spring helps. Another help is three-story wintering that includes extra stores of honey, extra pollen and an ample winter cluster. Two weeks before your anticipated moving, seek out these strong colonies and after inspecting for disease, reverse the position of the colony. Upon the original stand place a hive body with a couple of combs of honey, one comb of pollen and then a frame of eggs from a previously selected breeder. If you have no breeder, use a frame of eggs from the colony that you have reversed. The very fact that it is so strong is reason enough to allow a daughter queen to be raised.

It takes only one frame of eggs, and the bees clinging to it (be sure the queen isn't adhering to this frame) to raise a queen. The impetus of the nectar and pollen being brought in by these old bees plus the activities of the few young nurse bees, will give you as good a queen as can be produced in any manner. Also, the morale of this type of nuc is good since it has an accumulation of reserve honey and pollen and its large quota of worker bees to ward off robbers. Best of all, this type of nuc takes very little attention after it has been made up and if it has ample honey, leave it for a month, come back, check it for a laying queen and then it can be given young bees or emerging bees.

Remember, this should be used only on the strongest of colonies because these would be inclined to swarm if they had been moved to a pollination chore without some system of weakening. Bleeding the field bees off by this system causes the young bees of the parent colony to go out as fielders and lessens the confusion which is a prime factor in early swarming. If two weeks

elapse before moving this parent colony, it will be equipped with about the same field force as formerly and the colony can safely be used for pollination.

Early spring increases can be made with a maximum of success and a minimum of attention but if you rent all your bees for spring pollination, your increase will have to be made later. There are several methods. First of all, you can split the extremely populous colonies as they come back from the orchards, using your own favorite method. These may be cut into small units with cells or home-raised queens or queens you have bought from your favorite queen producer. It is suggested that you use your own particular method. The following has been found most satisfactory and is used in early June in the central coastal states:

The whole yard of bees moved back from a pollination chore is first inspected for disease and after they are found 100% disease free, the brood is divided, putting about three frames into each nuc body or hive body, whichever you have to use. While making an inspection we usually mark the number of frames of brood on the outside of each colony in chalk. We figure up the total frames of brood and estimate the extra equipment we will need. We bring back bottom boards, covers, inner covers and empty standard hive bodies. We allow one or two days to elapse for colonies to settle down, in the meantime setting up the empty hive bodies and bottom boards and filling the entrances of these hive bodies with grass. After allowing a couple days, we go back and split the brood indiscriminately, putting about three frames of brood and a frame of honey in each empty hive body, not bothering to look for the queen or bothering much about the division, just so each hive is left with three full frames of brood and a frame of honey and pollen after we are finished. The colonies on the old stands are usually left with two frames of brood or less since they will be strengthened from incoming field bees. We do leave them a few empty combs to allow the extra number of bees some frames for clinging space.

About two weeks after this operation, we go back and make a thorough inspection. The colonies with eggs are filled up with empty combs because they have the old queens



Above: Nucs overwintered on tops of colonies.

Below: All interchangeable equipment makes this yard a pleasure to work.



and will need more room. Colonies not showing eggs, but looking as though their cluster of bees and queen cells they have raised are ample are closed up and entrances further contracted with grass if thought necessary. Any nuc that shows too much evidence of drifting is united with another weak one to be sure all our nucs are strong.

Dry sugar is often given at this time if necessary, but we usually try to pick an area where there will be a June flow and honey coming in when we make this wholesale split. Colonies are allowed to sit with monthly attention giving them more stores and combs and supers. Usually they build up into normal colonies.

Warning! Do not use this system if your stock is poor or colonies are not overpopulous in your area. Perhaps before trying it on a wholesale scale, it would be better to experiment with a few colonies.

We have speeded up this type of

increase by buying queens and installing with this brood, but we found this speeded up operation was not worth the money spent for queens. We especially liked the propagating of our own stock and the slow build-up of the nucs raising their own queen, storing a reserve of honey and pollen as they did so.

If you are fortunate enough to have both spring and summer pollination orders, you will have to think about making this increase in the fall and though it sounds like the wrong time to make increase, we have oftentimes thought it might even be the best. Strong colonies returning from cranberry pollination in August are usually placed in a location where the fall flow is known to be good, and as this fall flow starts the first of September, we examine our colonies for disease and at the same time check out the strong colonies that can spare a few frames of brood. Colonies at this time are usually in two or three stories and a double screen is placed above the strongest colonies. An empty standard frame body with a beetlight partition in the center is placed above the double screen. One frame of eggs, a frame of honey and

a frame of pollen is placed in each section. A caged queen that we have either bought or raised is placed in each section. The entrance holes on these nucs, which are bored near the top, are closed with grass and we proceed to the next colony. At the slightest sign of robbing, we leave this operation and go to the next yard to do the same thing. We can come back to this yard some other day and keep making nucs above strong colonies.

If the fall flow is good, these nucs will build up and by frost there will be two good sized nucs to winter above each colony. We usually check these colonies for feed after frost, giving them frames of sealed honey from other colonies. They are checked again in the first warm days of February and fed either honey or Fuller candy, whichever we have available. These nucs are used in the spring in several ways.

This is the way we like best: As we move colonies away for spring pollination, we screen and move them in late afternoon and place one of these overwintered nucs on the stand of a moved colony to allow it to catch the excess bees. This builds the nucs up rapidly and you

will oftentimes be able to use them in your late spring pollination. If your colonies do not build up that quickly in your area, extra feed can be given and possibly extra brood and bees from some other colony added to strengthen them for summer pollination chores.

If we are not in need of these nucs, they are allowed to build up and later on split and extra increase is made. However, each man to his own method and though we have seen these nucs wintered as far north as northern New York State, it would be best to try a few in your area before going overboard for this system that we like so much.

Perhaps the listing of our favorite methods of making increase will give you ideas for handling your own problems of replacing colonies lost in the pollination work. It has often been said that renting bees for pollination is just a matter of selling your bees and you keeping the equipment because the number of colonies lost by poisoning, reduced morale, faulty manipulation, disease, and other reasons, is always greater for the pollinculturist than for those in any other type of beekeeping. New Jersey



Making Increase in Spring

by Julius Lysne

SPRING increase may be made by the following method: Into a ten-frame hive body, place two or three frames of brood and adhering bees. The hive should contain four combs of honey for food and the other frames should be drawn comb. Between the combs of brood place a young laying queen in her cage.

To assure release of the queen in about three days, shove a match stick through the candy end of the queen cage. The hole thus made

will hasten release of the queen. Now close the hive and stuff every opening with grass being careful to fill up the entrance so that not one bee can escape. Newly established colonies are always hampered by robbers and this will keep them out.

In four or five days, the bees will have released their queen and also will have removed enough grass to effect an entrance. Bees will now be found carrying pollen into the hive.

If the queen is found laying, exchange the hive location with that of a strong colony. This will give the new colony a strong field force and the incoming pollen and nectar will stimulate the queen to heavy egg laying. It is surprising how fast such a colony will build up. By this plan a fair crop of extracted honey can be obtained and with little more cost than that of a young laying queen from the South.

Wisconsin



Two Things to Think About

Now that the Federation has been revamped into a strictly producer organization, it is time to consider just how valuable it is to the producer. It takes time to raise the structure of a new building; it takes time for the eye to see the form of what the blue print intended. We can say now that the Federation is a going organization and one whose endurance means a great deal to all of us.

The American Honey Institute has long been an effective avenue of publicity and it has had a deep effect on the recognition of honey values. The Federation on the other hand is a relatively new attempt at national unity to provide a way to shoulder industry problems for which the Institute is not constituted.

Many beekeepers have not heard of the Federation and few yet support it. It often seems to mean little to the beekeeper whose honey moves locally or whose interest in beekeeping is transient or whose self-sufficiency leads to the belief that he does not need the Federation and so has no concern with it.

But, there are two things for such folks to think about. We have asked quite a few beekeepers with avocational interest in bees how they dispose of crops. They all sell their honey, most of them to the retail store. They all admit that honey today is an item readily accepted by the store; and that the price levels in competition are not now severely different.

What they do not understand is that the efforts by the Federation and the Institute to popularize honey have brought about the ready acceptance; and that the net effect of price support has toned down the severity of price competition. Don't you think these two things are worth your continuing support to our national organizations?

We Need to Scotch Some Ideas

With the 1953 price support program for honey very much in the making at this time, an examination of some of the things taking place in the beekeeping industry is warranted.

We have been told that if the support level were too high, it would result in an increase in numbers of colonies and in the amount of honey produced.

In 1950, producers received an average wholesale price of 11.6 cents per pound for honey, and we had 5,612,000 colonies with a total production of 233,013,000 pounds. During 1951 and 1952 the number of colonies decreased until we had 104,000 less colonies in 1952 than in 1950; but honey production increased to 258,254,000 pounds in 1951 and 272,771,000 pounds in 1952; and this is the reverse of what we are told can be expected.

Moreover, the average wholesale price for honey

increased during this period to 11.9 cents per pound in 1951 and to 12.6 cents per pound in 1952. At the same time numbers of colonies decreased each year. Certainly this is statistical evidence to "scotch" any idea that the support level is such that it results in an increase in numbers of colonies.

It appears to us that there are two major factors which have prevented further decline in numbers of colonies, and which have given to the industry some semblance of optimism and perhaps prosperity. These two factors are the honey price stabilization programs and the plentiful foods promotion of last October, which showed us what could be done to increase honey consumption and sales, and stirred the industry to cooperate for its own benefit.

It's Later than We Think

A recent semi-monthly honey report from Washington carried the final estimates on Canada's honey production for 1952, issued by Canada's Department of Agriculture Marketing Service. Their figures show that from 1949 through 1952, numbers of beekeepers have been decreasing from 25,870 in 1949 to 15,950 in 1952; numbers of colonies also have dropped from 473,450 in 1949 to 387,950 in 1952; but honey prices have been maintained at high levels compared to those in the United States—13 cents per pound in 1949, 15 cents in 1950, 16 cents in 1951, and 15 cents in 1952.

What is happening in Canada? Our information is that honey prices have been maintained through cooperative marketing in most provinces, and also by an extensive program of provincial and dominion advertising and promotion. Promotion and orderly marketing have maintained price levels, but producers are discouraged and quitting beekeeping by the droves, simply because they cannot sell their honey or find selling it extremely difficult.

In the United States we find a different yet similar picture. Numbers of colonies have been gradually dropping from their peak of 5,612,000 in 1950 to 5,508,000 in 1952; we know that many have quit beekeeping for various reasons; but prices have risen from 11.1 cents at wholesale in 1949 to 12.6 cents in 1952.

While we show somewhat the same trend as Canada in decline of number of colonies and number of beekeepers, changes have been slight as compared with Canada's. Our situation is improved because of price support, subsidy programs and plentiful foods promotion, but this is Government help. Shouldn't we examine with great care just where we would be today if we had depended upon our own initiative and enterprise, as has Canada? And do something for ourselves? We believe that this is the major task of the proposed Council. We wish it a speedy organization and an active, aggressive program!

Report of the Bureau Of Entomology and Plant Quarantine

In the report of the Chief, Avery S. Hoyt, of the Bureau of Entomology and Plant Quarantine, some of the results of honey-bee investigation are included. Fifteen lines of honey bee progeny at Madison showed heritable differences in production and behavior. The most productive lines gave an average yield of 239 pounds, or 2½ times that of the least productive.

Free flying drones best for breeding—at Baton Rouge, sperm from free flying drones, used in artificial insemination, resulted in laying in 82 per cent of the queens. In a group of 68 queens, inseminated with sperm from drones that never had a flight, only 44% lived to produce eggs.

Low temperature—Two colonies in a deep freeze, at Madison, survived 6-7 weeks at temperatures of 40 to 50° below zero.

Cotton pollination—Honey bees and native bees, in Arizona, were found the chief pollinators of cotton blossoms. Using honey bees for cotton requires concentrations similar to that recommended for alfalfa.

Red clover seed—Harvesting losses of red clover seed in Ohio were heavy although weather was unusually favorable. In one case, the combine discarded 43 per cent of the seed in the field. Such losses, or greater ones, seem to be the rule. Seed production could be increased from 50 to 100 per cent by a moderate improvement in harvesting.

Honey bees affect cotton flower development—In Arizona, flowering cotton was enclosed in plastic screen cages. In some, honey bees were placed. In these the new (white) flowers that opened on any one day were pink by 5 p. m. and almost completely closed. Without bees, the new flowers were still white and open. The earlier closing should afford increased protection to the stigma. It might also guide breeders in finding the proportion of natural crossing in open fields.

Those Dry Years . . .

According to information from Bert Woodman, the Woodman bees in 1893 did not give a single pound of surplus honey from over 400 colonies because the season was so extremely dry. This was duplicated in 1933, just forty years later.

Current Reading

Conducted by
M. G. Dadant



Pasture Improvement In Illinois . . .

Circular 753 of the Illinois Extension Service by Walker and Hackleman has to do with "Five Steps in Pasture Improvement." A breakup is followed by soil tests, the adding of necessary ingredients for balance, planting and pasturing. For planting, brome grass and timothy are recommended as a mixture with alfalfa, sweet clover, mammoth or red clover, ladino, birdsfoot trefoil and lespedeza, the latter best in more southerly areas.

Bee Research Bulletins . . .

The Bee Research Association (Bee World) is publishing some bulletins which may be of interest to our readers:

Pollen Analysis of Honey—A. Maurisio, 8 pages ----- 15c
Composition and Properties of Honey — J. Pryce-Jones, 8 pages ----- 15c

Orienting Ability and Communication Among Bees—K. Von Frisch, 12 pages ----- 22c

We are stocking a few of each at the American Bee Journal for your convenience.

New Spanish Bee Journal . . .

First number of a reactivated magazine comes with the July number of EL COLMENERO ESPANOL, under the direction of Santiago Mansanet and published at Mila y Fontanals in Barcelona, Spain.

This magazine was originally founded and published by Don Enrique de Mercader-Belloch in 1891.

The yearly price of subscriptions is \$1.25.

Alfalfa Seed Production In Kansas . . .

Circular 290 of Kansas State Agricultural College at Manhattan has the above title. Written by C. O. Grandfield and W. W. Franklin, it

goes into varieties, methods of producing, insect protection, harvesting and processing and grading.

The pages on pollination are of special interest to our readers. While several species of wild bees are better alfalfa pollinators than the honey bee, still the latter remains largely responsible for the pollination of alfalfa fields on account of the availability of the honey bee, and because pollen-gathering honey bees are very efficient pollinators. Honey-bee colonies should be scattered about the fields in groups rather than singly. Suggestions for pollination services are listed as follows:

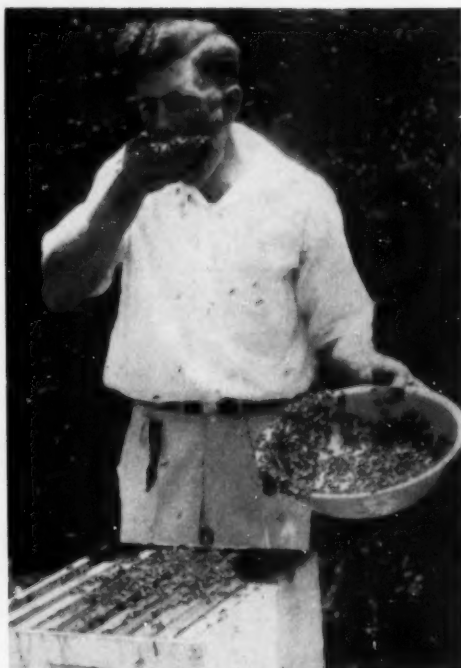
1. Three colonies of bees per acre at \$3.00 a colony.
2. Four colonies of bees per acre at \$4.00 a colony.
3. Five colonies at \$5.00 per acre.
4. \$2 to \$2.50 per colony for moving plus 1c per pound for all seed above the usual average.
5. \$2.00 to \$3.50 for moving per colony, plus a guarantee of 60-75 pounds of honey per colony.
6. In heavy seed-producing areas:
 - (a) 20 per cent of all seed produced over 400 pounds per acre.
 - (b) 30 per cent of all seed produced over 700 pounds per acre.

The 28-page bulletin is well written and illustrated. It is an excellent addition to our information on alfalfa seed production.

Beehives and Apron Strings

This honey, fascinating book bears the above title. Nola R. Hooper writes in a fine warm style and the last chapters dealing with peculiar hive activities are pleasant reading and factual as well. Mrs. Hooper's daughter did the illustrations, and apparently her husband jealously tried to keep full charge of the small apary. It is a pleasant readable book with a nice style, is clothbound and may be obtained from the publishers, Comet Press in New York. Price \$2.50.

Bee Stunt



on TV

Sunday evening, January 18, at 6:00 p. m. over Channel 4 WHBF-TV Rock Island, Illinois, on Art Baker's program "You Asked For It" appeared George S. Biggers, "Bee Master," Ojai, California. He was shown manipulating his hives without the use of gloves or veil. He explained that bees sting only to protect themselves as they do not like to use their stingers, knowing that their life is lost at this time, as their stinger is torn from their body. He removed comb after comb from a hive and then shook a comb of bees into a bucket, then dumping them into his hand, he put a handful in his mouth and kept them enclosed for a period of 30 seconds. He then opened his mouth and let them crawl from his mouth showing that they had not stung him. Art Baker, of course, stood by but only by wearing a veil and gloves.

George Biggers then displayed a comb of honey and explained that bees travel a distance of two and a half times around the world to pro-

duce a pound of honey.

He then asked Art Baker to select any bee on a comb and he would have it sting him by crushing it against his hand. This picture was taken at close range, showing the bee in the act of stinging, and leaving the stinger in the flesh as it was torn from its body.

The preceding account was written by Mrs. Evelyn Kopsicker, secretary in the office of ABJ, who saw Mr. Biggers' telecast. After hearing her account, we wrote to Mr. Biggers and his remarks on the program follow:

The producers of Art Baker's "You Asked For It" contacted us in October 1952 wanting us to appear on their program. They stated that the "Bee Whisker" program (see February 1952 ABJ) had been successful and that the public wanted to know if we could do anything else spectacular with bees. People were interested in a portrayal of the educational aspects of bees.

A compromise was worked out

using the bee head and stinger to show the usefulness of the bee and bring out the fact that they were not such villains with their stingers. We rehearsed for two days, and it being winter the bees were flighty and acted as if they might give trouble.

Everything worked out smoothly in the actual telecast up to the time I was to hold the bees in my mouth. Many thought a bee stung me. The trouble was that one of the bees kept trying to crawl down my throat and I kept contracting my "Adam's apple" to discourage it.

There is much evidence of public interest in this act; apparently ten times more than in the one of the "Bee Whiskers." We hope the public will remember their honey.

Some eastern beekeepers might question the presence of so large a pattern of brood on combs televised for this time of year. They came from eucalyptus locations which have been in bloom since November 1952.

About a month ago I purchased some package bees. One hive has young brood but they are nearly all drone cells. What would you advise?

Everett C. Devenny, Missouri

If you hived the bees on poor combs, such as combs with holes in them or sagged combs, the bees will draw drone cells in the bad places

on the combs and the queen will have drone cells to lay in. You might have a drone laying queen, of course, which is the result of the queen not being properly mated. If you are sure that these bees were hived on good combs, write the people that you purchased the bees from and explain the trouble to them. If the fault is in the queen,

you should kill her and introduce another young queen. If you did hive the bees on poor misshapen combs, I would certainly take the poor combs out, put good combs in and given the queen a chance.

Some beekeepers use a drone trap to get rid of drones. A better plan seems to be to requeen any colonies that are producing too many drones.

The Literature of Beekeeping

by H. Malcolm Fraser

READERS may be inclined to remark that the literature of beekeeping does not exist, for manuals of beekeeping are from their nature didactic compositions unsuitable for presentation in literary form. A moment's reflection, however, will recall the existence of Maeterlinck's "Life of the Bee" and the possibility that others like it may be found.

One very attractive book, though hardly worthy of a place in literature is a tiny volume, five inches by three and a quarter entitled "The Natural and Enigmatical History of Bees." This was published in 1800, and the frontispiece, the only illustration, shows a lily bud on which a horrified worker is standing, gazing at a male sylph, who is reclining on another petal. Of course the book was intended to delight the young ladies of the Academies of the period; the Natural History part gives a good account of the management of bees in skeps, but the Enigmatical describes how the sylph entered the hive, conversed with the drones, was visited by them in turn and learnt various botanical facts and some bee poetry.

Edmund Southerne, the writer of the first original book in English about bees enlivened his pages with two stories. One was about an old Vickar who promised a couple of

parishioners his next two swarms. These, of course, came out at the same time and united: the Vickar divided them by his art but, ALAS! one of the recipients was a necromancer and enticed his neighbour's bees into his hive and the Vickar had to make peace by giving the sufferer a third swarm when it emerged. The other story deals with a tithe swarm which was duly delivered to an incumbent in his hall minus the skep in which it had been brought.

The place of the swarm as the most dramatic feature of beekeeping in the days of skeps is also made clear in "Melisselogia," published by the Rev. John Thorley in 1744. This contains a really wonderful story about a maid upon whom a swarm settled and covered her breast and face. She was persuaded to stand still; the queen was discovered and removed and it was thought that all would be well. As the bees did not leave her another examination was made, a second queen was removed: the bees followed her and the maid was left beeless and unstung.

Thorley is interesting from other aspects. An intensely religious tone pervades his book; he exhorted his readers to be loyal to that good King, George II, and he discovered the method of subduing bees by means of the smoke of the dried

fungus, known as "Puff Ball."

Another of the Ancients, whose claim to a place in literature is more assured, is Samuel Purchas, M. A. Cambridge, son of the famous author of "Purchas, His Pilgrimes." His book is a delight to read. Some may, perhaps, object to the 300 sermons on bees (he was Rector of Sutton Essex), (I nearly wrote near Southend-on-Sea, but that place did not, I think, exist, when Purchas wrote in 1657), but the discourses on the hornets who built in his empty hives, on American bees, on grasshoppers and so forth, and on bee gardens make us want to know more about these subjects. Anyhow, how can a place in literature be refused to an interesting writer whose first chapter deals with "The Excellency of Bees" and, later on, finds room for one on "Observations and Discourses, Historical and Fabulous"? He has claims to be a scientist, too, for he opened sparrows' crops in order to prove that they eat drones only and wrote a chapter in which he quotes Harvey, the discoverer of the circulation of the blood, to prove that bees must have lungs, because they have hearts and their blood circulates.

Other writers have claims to mention but they are young and modern and can afford to wait their turn.

England

Drugs against Disease

In the Minnesota Beekeeper for January, T. A. Gochbauer writes about the "Chemical Control of Bee Diseases." He says: "The Use of sodium sulfathiazole to control American foulbrood is an established fact in beekeeping practice in Minnesota where disease control is a problem." He might have said that this is now true in this country wherever bees are kept. He advises a minimum dosage of a half gram to a gallon of sirup before adding supers in spring or after extracting in fall. But he warns that the con-

tinued use of sulfa in heavily diseased areas, as a cure for disease rather than as a preventive, may result in sulfa-resistant AFB that will flourish in spite of it. It has happened, and that is why we have always advised the use of sulfa as a preventive rather than as a cure.

Terramycin and streptomycin (dihydrostreptomycin and streptomycin sulphate) have considerable promise of curing and preventing European foulbrood. We have used Terracon 180, made by the Chas. Pfizer Co.,

Inc., in Brooklyn, New York, so far successfully. We now have a less expensive form from them, Terracon 25, and some streptomycin sulphate to use this year.

Fumagillin has been tried with some promise in the control of Nosema. It is new and likely expensive now. Nosema is an ever-present menace, sometimes quite destructive.

It would be wonderful if a single feeding of bees with drugs would eventually prevent all three diseases!



The Use of Honey in White and Whole Wheat Bread

by Loren B. Smith and John A. Johnson

Kansas Agricultural Experiment Station

Editor's Note: In this concluding article, the authors show that honey can be detected in bread by the consumer at 3 or 6% levels. 62.5% of the unfavorable consumer reactions to honey was attributed to buckwheat, heartsease, fall flowers and tupelo honeys. All others were regarded with favor. The use of 6% honey in whole wheat bread is recommended. Heartsease, buckwheat, fall flowers and horsemint honeys were considered undesirable from flavor viewpoint. These honeys may be blended up to 10% with other desirable honeys.

Consumer Acceptability of Bread Made with Honey

The effects of various honeys on aroma and taste of bread are very important. Organoleptic tests were performed at both 3% and 6% honey levels in order to determine whether or not the presence of the honey in bread could be detected by the consumer, and to determine which flavors, if any, might not meet with consumer acceptance.

At the 3% honey level, 55% of the tasting panel detected the pres-

ence of honey in the bread. When honey was increased to 6%, detection by the panel increased to 59%. Statistical analysis showed those percentages to be highly significant.

Further organoleptic testing to determine which of the honeys might lend an offensive aroma or flavor to the bread showed a total of 21% of unfavorable reactions. Of these, 62.5% were divided between buckwheat, heartsease, fall flowers and tupelo honeys. Buckwheat and heartsease honeys were shown to be definitely undesirable, while tupelo and fall flowers were borderline cases. Orange is a strong-flavored honey which proved to be quite acceptable.

Another series of organoleptic tests showed that buckwheat honey could be used when mixed with a mild-flavored clover honey in amounts up to 10% of the blend. Tupelo, heartsease, and fall flowers could be blended with a mild-flavored clover honey in amounts up to 15% and still meet with consumer approval. Use of these honeys did not show deleterious effects on bread quality at the 6% level. It was assumed that other honeys

could be blended in any proportion, since they were acceptable when used alone.

Toasting of Bread Containing Honey

A portion of nearly every loaf of commercial white bread is consumed as toast. Therefore, the effects of toasting honey bread are quite important. The aroma of honey in the bread is amplified by the heat in the toasting process, resulting in an exceptionally good effect for several honeys. Buckwheat, horsemint, and heartsease honeys produced objectionable odors. Cotton, orange, white clover, star thistle and sweet clover honeys were judged best. Others were regarded as giving off a fairly good aroma. There was no difference in appearance or palatability between those slices containing honey or sucrose.

Conclusions Regarding the Use of Honey in White Bread

The use of honey to replace 6% sucrose in white bread presents no problems in production. No changes are required in absorption, mixing, fermentation machining, proofing or baking time. Natural variation in the levulose-dextrose ratio, pH,

nitrogen, sucrose, moisture and dextrin content of the various honeys cannot be detected in the baked bread. The most distinguishing effects of honey on white bread production are on aroma, flavor and color. The effect of honey on crumb color of bread is proportional to the pfund value. Buckwheat, fall flowers, horsemint and heartsease honeys were the only honeys that were considered undesirable. These honeys may be blended with other desirable honeys to the extent of 10% of the blend. Orange and tupelo honeys retain strongly their distinct honey flavors after baking of the bread.

Whole Wheat Bread

Results of the experiments performed on white bread with respect to moisture retention, crumb firmness and variables of chemical nature are also applicable to whole wheat bread. However, due to the flavor and crumb color masking qualities of whole wheat bread, it was thought that greater quantities of honey could be utilized in this type of product. Experiments were performed with the intention of determining maximum limits of honey that could be used without deleterious effect on production or quality. Whole wheat bread was made containing 3, 6, 9, and 12% of honey solids.

Heartsease and buckwheat honeys produced a musty aroma and taste in whole wheat bread. At levels of 6% and more, horsemint and fall flowers honeys were undesirable. Tupelo and orange honeys were easily detected in the bread at all levels. Other honeys were not detectable as such, but did enhance the flavor of the bread considerably.

When honey was increased beyond 6%, deterioration of bread quality was observed. Problems in fermentation and machining also occurred at the 9 and 12% levels. It is very evident that the old adage about too much of a good thing also applies to honey used in bread.

Conclusions Concerning Whole Wheat Bread

Floral sources of buckwheat, heartsease, fall flowers, and horsemint honeys are not recommended for use in whole wheat breads except in blended form as previously described for white bread. Since horsemint honey is the milder of these honeys, it is assumed a blend containing 15% horsemint would be as acceptable as fall flowers honey

in a similar blend. The use of any honey in amounts greater than 6% results in lowering bread quality and necessitates special handling. Richness of flavor is enhanced by the use of honey, but if honey flavor is especially desired, tupelo or orange honeys give best results.

Consumer acceptance tests were not carried out on whole wheat bread, but in the opinion of the scorers, tupelo honey would be as acceptable as orange honey in whole wheat bread.

Proposed Specifications for Purchase of Honey for Use in White or Whole Wheat Bread

1. All honey containers should be clearly labeled, showing grade, floral source, moisture content and color in mm Pfund as well as U. S. Department of Agriculture color standards.

2. Honey for bakers' use should be "U. S. Grade A" or "B," according to U. S. standards for grades of extracted honey, effective April 16, 1951.

3. The Pfund colorimeter reading should not exceed 70 mm for honey to be used in white bread.

4. Predominant floral sources of buckwheat, fall flowers, heartsease, and tupelo honeys should not be used

in white bread, except in blends as noted in item 6.

5. Buckwheat, fall flowers, heartsease, and horsemint honeys should not be used in whole wheat bread, except in blends as noted in item 6.

6. Blends of acceptable honeys containing 10% of buckwheat, or 15% of heartsease, fall flowers, or tupelo honeys are acceptable.

7. Honey should conform to Pure Food and Drug Laws for this commodity.

8. Honey for bread baking purposes should be heat-treated at 160°F. for 30 minutes to retard granulation and enzyme activity.

ACKNOWLEDGMENTS

Dr. R. L. Parker, Department of Entomology, Kansas State College, for aid in obtaining certain honeys as well as analyses; the American Beekeeping Federation for funds which made possible the research; Mr. Al Babcock, Cloverdale Honey Co-Op, Inc., Fredonia, N. Y. and Mr. Burel Lane, Finger Lakes Honey Producers Co-Op, Inc., Groton, N. Y., for contributions of honey used in the research; and to Eastern Regional Research Laboratory of the United States Department of Agriculture, for chemical analyses of the honeys.

Table II. Sugar analysis of honeys.

Floral Source	Sucrose %	Levulose %	Dextrose %	Levulose	
				Dextrose	Dextrin
					%
Y. sweet clover	6.5	41.2	33.8	1.22	0.15
Mesquite	2.0	42.0	35.0	1.20	.20
Ariz. alfalfa	3.2	39.6	38.5	1.03	.57
Star thistle	2.3	38.9	36.6	1.06	.64
Tupelo	2.1	42.8	30.8	1.39	.25
Eucalyptus	2.2	39.8	33.8	1.17	.43
White clover	3.9	40.2	37.8	1.06	.12
Orange	7.2	40.6	35.0	1.16	.19
Heartsease	3.3	40.7	37.4	1.09	.03
Horsemint	3.7	38.7	35.7	1.08	.32
Spanish needle	3.6	43.1	31.3	1.38	1.93
Buckwheat	3.3	37.8	35.4	1.06	.54
Fall flowers	2.9	38.6	37.9	1.02	.50
Lt. amb. alfalfa	4.7	41.6	35.1	1.19	.12
Cotton	3.2	39.5	38.6	1.02	.39

North Sea Floods . . .

Losses to beekeepers, particularly in Holland, were not inconsiderable in the disastrous floods which struck in February in the European lowlands. A Dutch beekeeper has submitted an article for publication in the American Bee Journal hoping that we might atone by sending some recompense for beekeepers'

flood relief.

Our response has been to send a contribution regardless of the submitted article. It occurred to us that helpful-minded readers might like to do something similar. Money orders or personal checks sent to Farmers Bank, Bee Disaster Fund at Renkum in Holland will be properly apportioned, we are sure.

1953 Program of the American Beekeeping Federation

1. RESEARCH

a. Pollination—Need for this research to get facts we now think we know, but do not.

b. Extension—Secure a full time extension specialist in pollination.

c. Bee Breeding—Still in its infancy.

d. Nosema—We have learned there is to be some practical research this spring in actual commercial operations.

e. EFB—EFB is still very costly to the western operator. It is now moving to the Middle West. Research to control EFB is urgently needed.

f. Honey Utilization—This research to find new uses for honey, and better bottling methods.

g. Honey House Sanitation—The need is great, for a code pertaining to our industry. We do not believe that the Dairy Code can apply to honey handling.

2. MARKETING

a. Price Support and Promotion—The convention at San Jose, California, went on record favoring the continuance of the Loan and Purchase Agreement Program and also, for again having the PMA Plentiful Foods Promotional Program in 1953.

b. To publicize methods of marketing.

c. To study plans for a continuing Marketing Program.

3. ORGANIZATION

a. Coordination of Regional Meetings—Cooperate with state associa-

tions in districts to have meetings in chronological order to allow speakers to make consecutive meetings in one trip, thereby saving travel expense.

b. Representation by States and Districts on an equitable basis, on the Federation Board of Directors.

c. Increase the membership with special attention given to securing members in the eastern states.

d. Interest the hobbyist and back-lotter to become members.

e. Increase the membership of the "500" Club.

f. Council—Help organization of Industry Council into top industry organization.

g. News Letter—Attempt to make the News Letter self-supporting.

h. RMA—To secure representation on Seed Advisory Committee and on the Food and Nutrition Committee of the RMA.

i. Washington Contact—To further amiable relations with Government Officials—To acquaint Federal Agencies with the problems and needs of the Federation, for closer contact with Federal Research and Marketing Agencies.

To consummate a Federation Program, we require funds. To raise funds, we need more members. To increase Federation membership, we need a PROGRAM.

The above program was planned by the Board of Directors and the Executive Committee, at San Jose, California, for the year 1953.

The Federation Constitution was

changed at the San Jose convention, to allow Federation members within state organizations to organize for representation on the Federation Board, where the majority within the state organization refuse to affiliate with the national organization. The way is now open for every state to be represented on the Federation Board of Directors.

The Officers of the Federation hope that with the achievement of a program such as here given, all industry investment will be protected and increased in value. Protect your investment, JOIN THE FEDERATION!

The Executive Committee of the Federation. H. A. Schaefer, President.

At the Executive phone conference meeting, March 9, the following action was taken:—

1. Terminated Glenn Jones temporary service as Sec'y-Treas. as of March 31, 1953.
2. No action on hiring another Sec'y-Treas. Position is open for applications.
3. Directed the President to mail copies of all applications to all Executive Committee members.
4. Directed the President to secure bonded commercial bookkeeping service for Federation books.
5. Requested that all remittances for dues be mailed to the Office of the President, American Beekeeping Federation, Osseo, Wisconsin.
6. Voted Baltimore, Md. as the city for the 1954 Convention.

The 1953 Executive Committee—Left to right: S. J. Watkins, Calif.; Lester L. McGee, Texas; Clarence L. Benson, Ariz.; Henry Schaefer, Wis.; Howard Foster, Mont.; Leslie Little, Tenn.; Glenn Gibson, Okla.; and Howard Graf, Wash.

S. J. Watkins of California (left) who did a good job in making preparations for the 1953 Convention, talks things over with Dr. C. L. Farrar of Wisconsin during the sessions at San Jose. (Photos courtesy Henry Schaefer.)





This picture and the one at the right were sent in by Rudolph Valuch, of Cicero, Ill. They were taken by his father-in-law, Louis Antonacci, during a visit to Italy in 1948. This hive is typical of those in the apiary in the town of San Pio delle Camere in the province of Aquila.



The two beekeepers bending over the hives in their garden apiary are Ernestina Silveri and her 19-year-old daughter. The garden has fruit and nut trees—peach, plum and almond—and in the surrounding countryside are many vineyards and wild flowers.



Three hundred pounds of extracted and comb honey was the crop from this big one, which is as tall as its owner, Elmer C. Kennedy, of Iowa.



Joseph J. Cummings, of Massachusetts, sent this shot of Charles Johnson who helped him cut this bee tree. The bees were run into a hive in front of the opening. The hollow and the comb within it were seven feet long. Five pounds of bees were secured, but only about three pounds of honey from the comb.

THE RICH HONEY FARMS

JEANERETTE, LOUISIANA

ITALIAN PACKAGE BEES

Heavy with bees, no drones. Shipped by parcel post or express. For parcel post shipment add 75c per package for postage.

QUEENS

The finest money can buy. Your choice of two outstanding breeds. Painted, clipped or airmail at no extra cost.



Dadant's Starline Hybrids

Worth much more than the price we are asking. You have years of selective breeding and testing in the ancestry of this strain. Queens produced by Rich's efficient methods from Dadant's special hybrid stock. Gentle, prolific, and high performance similar to hybrid corn.

Rich's Leather Italian Stock

Gentle, uniform and good producers—will do their part in getting for you many supers of honey. Breeding stock selected for high production, non-swarming and gentleness. You will find them very profitable.

— PRICES —

	Queens		Packages			
	Starline Queens	Regular Italian	2-lb.	3-lb.	4-lb.	
1-24	\$1.50	\$1.20	\$3.50	\$4.50	\$5.50	
25-99	1.40	1.10	3.25	4.25	5.25	
100 up	1.30	1.00	3.00	4.00	5.00	

When ordering packages with Starline queens add 25c per package.

ATTENTION!

Foster Apiaries can make prompt shipment of
**BLUE RIBBON ITALIAN PACKAGE BEES
AND QUEENS**

Competitive Prices

HOWARD FOSTER

Box 239

Colusa, Calif.

ALWAYS BEST AHEAD OF THE REST

BERRY'S "OLD RELIABLE" STRAIN OF ITALIAN BEES

Definitely, the PREFERRED stock of MAJOR SUCCESSFUL HONEY PRODUCERS the WORLD over. INSURE your crop with young, vigorous, producing, DEPENDABLE BERRY BEES. Fifty-eight years of SELECT breeding.

PRICES TO MAY 10th:

Package Bees With Queens and Individual Queens

	Queens	2-lb. Pkg.	3-lb. Pkg.	4-lb. Pkg.	5-lb. Pkg.
1-24	\$1.15	\$3.50	\$4.50	\$5.50	\$6.50
25-99	1.10	3.40	4.40	5.40	6.40
100-499	1.05	3.30	4.30	5.30	6.30
500-Up	1.00	3.25	4.25	5.25	6.25

For prices on queenless packages deduct price of queen.

M. C. BERRY & SON

P. O. Box 684

Montgomery, Ala.

ITALIAN QUEENS

\$1.25 up to 51

"The bees I purchased from you last spring did very well. The colonies averaged about 175 pounds of honey." Wisconsin

Larger lots write for prices. Queens from stock of 250 to 300 productions mated to drones of similar stock.

BEES—2-lb.—\$3.75
3-lb.—4.75

Will take white, water white honey, extracting equipment, bottling, packaging equipment as down payment or in full. What have you to trade?

HOMER W. RICHARD

1411 Champagnolle St., El Dorado, Ark.

HIVE BODIES and SUPERS FOR LESS THAN \$1.00 EACH

Yes, you read it right—
it's a proven fact.

Join the increasing number of beekeepers who are using JOHNSON DOVETAILING MACHINES and are now saving more than one-half on their hive bodies, supers, bottoms and tops by making them in their own shop. Even with lumber as high as \$175.00 per 1000 board feet, hive bodies and deep supers can still be made for less than \$1.00 each. A real savings can be made that will mean money in your pocket. Investigate now. Write for circular.

CARL E. JOHNSON CO.

1557 Gregory Avenue
Lincoln Park 25, Michigan

Quality Italian Bees and Queens

3-lbs. with queen \$3.25
4-lbs. with queen 3.75

Deduct 90c for queenless package. Health certificate, full weight and live delivery guaranteed.

10% with order, balance before shipping date.

THE STAR BEE FARM
Adolph Guille, Prop. Hessmer, La.

ITALIAN PACKAGE BEES

2-lb. and Queen \$2.75
3-lb. and Queen 3.50

25c off on 100 or more.
Live delivery guaranteed.
Prompt shipment.

A. J. HOOK
Eutaw, Ala.

FREE...

A Sample Copy

"Gleanings in Bee Culture"

LOOK IT OVER

YOU WILL LIKE IT

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CAUCASIANS
PACKAGE BEES & QUEENS
 Special rate to trucker.
TROY H. NANCE
 3764 Jeffrey Avenue
 SACRAMENTO, CALIFORNIA

HONEY WANTED
 Cut Comb and Extracted
 Advise what you have
T. W. BURLESON & SON
 WAXAHACHIE, TEXAS

Selected Italian
Package Bees & Queens
 Write for Prices
Gene W. Stiles
 530 E Street Davis, Calif.

WE ARE NOW BOOKING
ORDERS FOR 1953
 Write for Price List on Package
 Bees and Queens.
CITRONELLE BEE CO.
 Citronelle, Ala.

STANDARD
Beekopers Equipment
 It pays to use the complete line of
STANDARD equipment. Ask your
 dealer about this quality line today
 or write us for catalog and prices.
Standard Churn, Inc., Wapakoneta, O.

Quality Bees and Queens
3-Banded Italians

Abundant supply - Prompt service - Full weight - Light cages - No disease - Health certificate - Safe delivery guaranteed.

Ask for our price list.

SUNRISE APIARIES
 Petal Mississippi

Yellow Italian Bees and Queens
 2-lbs. bees with queen \$2.75
 3-lbs. bees with queen 3.75
 Queens — \$1.00 each
 We guarantee live arrival and health certificate.
ALVIN J. DUCOTE
 Hamburg, La.

Modern Beekeeping
 If you are taking time to read, why not read the best?
 Condensed to save you time. Illustrated to give you pleasure.
 1 yr. \$1.50; 2 yrs. \$2.50; 3 yrs. \$3.25
MODERN BEEKEEPING
 The Picture Bee Magazine
 Clarkson, Kentucky

FOR TOP QUALITY AND SERVICE
 on Package Bees and Queens, send us your orders.



Reg. U.S.
 Pat. Off.

We Offer Two Quality Strains —
 Dadant's Starline Hybrid Queens
 Garon's Three-Banded Italian Queens

Queens will be mailed Postpaid. If Parcel Post wanted on Package Bees, shipments will be sent C.O.D. for postage and Special Handling Charges.

PRICES:

	Italians	Starlines	2-lb. W/Q	3-lb. W/Q	4-lb. W/Q
1-24	\$1.20	\$1.50	\$3.50	\$4.45	\$5.40 Ex. Col.
25-99	1.15	1.40	3.35	4.30	5.25 Ex. Col.
100-up	1.05	1.30	3.25	4.20	5.15 Ex. Col.

If Dadant Starline Queens desired with packages, add 25c per package.
 Queens clipped and/or painted without extra charges.

GARON BEE CO. Donaldsonville, La., U.S.A.

Three-Banded Italian Package Bees and Queens

QUALITY AND QUANTITY
 with the kind of service you have a right to expect.

Lots of	Queens	2-lb. w.q.	3-lb. w.q.	4-lb. w.q.
1-25	\$1.15	\$3.00	\$3.90	\$4.85
25-50	1.05	2.90	3.80	4.75
50-100	1.00	2.85	3.75	4.65

HOMAN BROS. Rt. 2 Shannon, Miss.

ITALIAN PACKAGE BEES AND QUEENS

	2 lbs. w.q.	3 lbs. w.q.	Queens
1 to 24	\$3.75	\$4.75	\$1.20
25 to 99	3.50	4.50	1.15
100 up	3.25	4.25	1.10

Weaver Apiaries, Navasota, Texas

ITALIAN BEES AND QUEENS

If you need Package Bees or Queens in a hurry write us for 1 or 1,000. Our increase in production means no delay to you.

	1-24	25-99	100 up
2-lb. pkg. and queen	\$3.00	\$2.90	\$2.80
3-lb. pkg. and queen	4.00	3.85	3.75
4-lb. pkg. and queen	5.00	4.85	4.75
Nice large queens	.95	.90	.85

All Queens personally reared and live delivery guaranteed.

MITCHELL'S APIARIES Box 391, Bunkie, La.

ITALIAN PACKAGE BEES AND QUEENS

Quantity (pkgs.)	2-lb. with queen	3-lb. with queen	4-lb. with queen
1 to 24	\$3.00 ea.	\$4.00 ea.	\$5.00 ea.
25 to 99	2.90 ea.	3.80 ea.	4.80 ea.
100 or more	2.85 ea.	3.75 ea.	4.65 ea.

QUEENS: \$1.00 Each Postpaid.

GOLD LEAF APIARIES Box 252 Hahira, Ga., U.S.A.

A trial will convince you—A-B-J ads produce results



There Is No Substitute for Quality

Better crops result from good bees properly managed. The know-how of thirty years producing the best goes into each package and queen.

Reg. U.S.
Pat. Off.

STARLINE HYBRIDS Write for prices **REGULAR STOCK**

J. M. CUTTS & SONS

Box 336

Chipley, Florida



PLANT'S 3-Banded ITALIANS — Productive - Gentle - Easy to Handle

The quality, service and reliability we offer is backed by over 45 years' experience. We guarantee prompt shipment, safe delivery by express and complete satisfaction. Health certificate on all shipments.

	1 to 24	25 to 99	100 or more
2-lbs. w./q.	\$3.50	\$3.25	\$3.00
3-lbs. w./q.	4.50	4.25	4.00
Queens	1.25	1.15	1.10

For larger packages add \$1.00 per lb.

W. E. PLANT

Rt. 2

Hattiesburg, Mississippi

THREE-BANDED ITALIAN BEES AND QUEENS

We guarantee liberal overweight packages - young mated queens - young baby bees - no drones. Shipping cages made of extra light material which saves on postal and express charges.

	Queens	2-lb. with queen	3-lb. with queen
1-24	\$1.00	\$2.75	\$3.65
25-99	.90	2.60	3.50
100 & up	.75	2.45	3.35

For queenless pkg. deduct price of queen. Prompt service, live delivery guaranteed.

LUCEDALE APIARIES

Lucedale, Mississippi

CAUCASIANS UNLIMITED

— Queens of Unlimited Quality —

1 to 11	\$1.25 each
12 to 49	1.10 each
50 to 99	1.05 each
100 or more	1.00 each

THOS. S. DAVIS

3129 Howe Avenue

Sacramento, Calif.



KELLEY—"The Bee Man"

BEES QUEENS

Trade Mk. Reg.
U. S. Pat. Off.

Three - banded Italian bees and **KELLEYS ISLAND** improved hybrid queens direct

from our own bee farm. Shipments start April 1st — express or parcel post shipment. Thousands of extra queens.

	KELLEYS ISLAND QUEENS	2-Lbs. Bees & K. I. Queens	3-Lbs. Bees & K. I. Queens
1-24	\$1.10 air mail	\$3.50	\$4.50
25-99	1.00 air mail	3.25	4.25
100 & up	.95 air mail	3.00	4.00

WALTER T. KELLEY CO., Clarkson, Kentucky

Renew Your Subscription Now To A-B-J

WESTERN

Beeswax Headquarters

Certified Beeswax Salvage Plant

Custom Rendering

Bleaching and Refining

Foundation Manufacturing

both plain and wired.

Top Cash Market for
Your Beeswax

**WOODROW MILLER
& COMPANY**

Colton, Calif.

Phone 1722

3-Banded

ITALIAN BEES & QUEENS

2-lb. pkg. with queen	\$3.00
3-lb. pkg. with queen	4.00
Extra queens	1.00

J. P. CORONA

Box 124 Phone 4-4394 Kenner, La.

HOWARD WEAVER'S Caucasian Queens & Bees

Quantity	Queens	2-lb. pkg. w/queen	3-lb. pkg. w/queen
1 to 24	\$1.25	\$3.85	\$4.85
25 to 49	1.15	3.60	4.60
50 & up	1.05	3.35	4.35

Queens shipped air mail when expedient. Package bees are usually shipped express collect unless buyer remits postage with order.

HOWARD WEAVER

Navasota, Texas

ITALIAN BEES AND QUEENS

2-lb. with queen	\$2.75
3-lb. with queen	3.25
4-lb. with queen	3.75

Deduct \$1.00 for queenless packages. Health certificate, full weight and live delivery guaranteed.

DAIGREPONT APIARIES

Hessmer, La.

2-lb. bees with Queen	\$2.75
3-lb. bees with Queen	3.50
Queens, each	.85
Additional pound bees	.75

Deduct 25c per package on
50 packages up.

Write for delivery prices on
large orders.

B. A. ANDERSON & CO.
OPP, ALABAMA

American Rabbit Journal Shows the Way to Success

The leading Rabbit Farming Magazine. Explains the growing meat rabbit industry. Non-fancy. Est. 1931. 3 years \$2.00; 1 year \$1.00; Sample dime.

American Rabbit Journal

Dept. S.

Warrenton, Missouri

QUEENS

75c EACH
AIR MAIL

2-lb. pkg. with queen, ea. \$3.00

3-lb. pkg. with queen, ea. \$3.75

Gulf Coast Bee Co.

Schriever, La.

ITALIANS

Package Bees with Queen

	2-lbs.	3-lbs.	4-lbs.
1 to 24	\$3.00	\$3.60	\$4.10
25 to 49	2.90	3.45	3.95
50 up	2.75	3.25	3.75

20% with Order, Balance Before Shipping date.

CLOVER BEE FARMS
Hessmer, La.

PACKAGE BEES with Mated Queens ITALIAN or CAUCASIAN

Customers, they are better bred, more profitable, gentle, and good honey producers. No deposit required to book your order, full weight, health certificate, and live arrival guaranteed with each shipment. Send your requirements now. Prices:

Lots of Queens	2-lb.	3-lb.	4-lb.
1-25	\$1.15	\$3.00	\$3.90
25-50	1.05	2.90	3.80
50-100	1.00	2.85	3.75

FARRIS HOMAN
Shannon, Mississippi

GOOD ITALIAN QUEENS ONE DOLLAR EACH

WHITE PINE BEE FARMS
Rockton, Penna.

BEE SUPPLIES

of
Finest Quality

at
Reasonable Prices

— Try —

Our Prompt Service

A. H. Rusch & Son Co.

MANUFACTURERS—JOBBER
KEEDSVILLE, WISCONSIN

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JOURNAL IN THE WORLD

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by taking out a subscription now
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Renew Your Subscription

DADANT'S STARLINE HYBRIDS

Top Quality, Disease Free, Second to None. The Bees of the Future.
Tops for Honey, Easy to Handle.

Starline Queens—\$1.50 each. Air mailed if it saves time.
2-lb. Bees & Q. \$4.50; 3-lb. Bees & Q. \$5.25—Express collect.
Italians 25c less each. Large lots cheaper, write for prices.



Reg. U.S.
Pat. Off.

S. J. HEAD

Crossett, Arkansas

PACKAGE BEES AND QUEENS

Quantity	2-lb. pkg. w.q.	3-lb. pkg. w.q.	4-lb. pkg. w.q.
1-24	\$2.60	\$3.50	\$4.50
25-99	2.50	3.40	4.40
100 or more	2.40	3.30	4.30

I guarantee health certificate, live delivery and satisfaction on all shipments.
Yellow Italian Queens of 1953—1-24—90c ea.; 25-99—80c ea.; 100 or more—75c ea.
Add 5c each per queen for air mail.

JOHNNIE ARNOUVILLE

Box 72, Hamburg, La.



Italian
Package
Bees &
Queens

6,000 PACKAGES FOR SPRING DELIVERY

	1-lb.	10-99	100-up
2-lb. pkg. with young laying queen	\$3.25	\$3.00	\$2.90
3-lb. pkg. with young laying queen	4.25	4.00	3.80
4-lb. pkg. with young laying queen	5.25	5.00	4.75
Extra Queens	\$1.00 Each		

PLACE YOUR ORDER NOW AND RESERVE CHOICE SHIPPING DATE.
Shipments By Express or Parcel Post. Guaranteed Live Delivery.

Quality Does Not Cost . . . It Pays

THE WILBANKS APIARIES

Claxton, Ga.

1953 MONEY-SAVING PRICES! TANQUARY BEES and QUEENS

Proven producers over the years, Tanquary bees and queens assure you gentle, easy to work with stock. Tanquary service is courteous and dependable.

PRICES FOR 1953

Quantity	Queens	2-lb. pkg.	3-lb. pkg.	4-lb. pkg.	5-lb. pkg.
1 to 24	\$1.15	\$3.25	\$4.00	\$4.75	\$5.50
25 to 99	1.10	3.00	3.75	4.50	5.25
100 to 199	1.00	2.75	3.50	4.25	5.00

PRICE OF PACKAGES INCLUDES YOUNG LAYING QUEEN

F.O.B. Springfield, Georgia

(Special Prices on Larger Orders)

TANQUARY HONEY FARMS, INC.

Springfield, Georgia

Western Union
Springfield, Ga.

Telephone
Springfield 139

Use ABJ Labels—They Get Results



DADANT'S STARLINE HYBRID QUEENS

BRED IN ISOLATED YARDS

Reg. U.S.
Pat. Off.

Starline Queens	1-24	25-99	100 up
Italian	\$1.50	\$1.40	\$1.30
	1.20	1.10	1.00



JOHN G. MILLER, 723 6th St., Corpus Christi, Texas

PACKAGE BEES AND QUEENS

Three-Banded Italian

QUEENS

Quantity	Price
1-24	.80 each
25-99	.70 each
100 up	.60 each

F. R. SAWYER

P. O. Box 574

Bunkie, La.

OUR CUSTOMERS SAY . . .

That our bees are best, after comparing them with others. For honey production, disease resistance and gentleness, our LADYLIKE Mountain Gray Caucasian Bees cannot be surpassed.

Health Certificate with Each Shipment.

Select untested queens	1-11	12-49	50 or more
	\$1.30 ea.	\$1.20 ea.	\$1.10 ea.
2-lb. pkgs. of bees with select untested queen	3.75 ea.	3.65 ea.	3.50 ea.
3-lb. pkgs. of bees with select untested queen	4.75 ea.	4.65 ea.	4.50 ea.

Circular Free on Request.

CAUCASIAN APIARIES

Castleberry, Ala.

- QUEENS -

Top Quality Italians

Personally Raised Queens

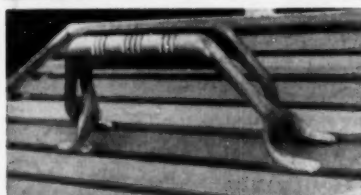
1-10	\$1.50
10-49	1.25
50-499	1.05
500 or more	1.00

Prices Postpaid — Airmail
No Baby Nuclei

SAM E. MOORE

NEW ADDRESS
Rt. 1, Box 620
Anderson, Calif.

NEW PHONE
REDDING-147W 3



FRAME-GRIP — SEND NOW!

This light modern tool is for easy handling and removal of frames from the bee hive. Orders promptly filled—Satisfaction guaranteed. \$3.00 plus 30c postage fee.

McCORD MFG. CO.

Rt. 2, Box 586, San Jose, California

PACKAGE BEES FOR 1953

Truck loads a specialty.
Nuclei made to order. Italian queens.

EUGENE WALKER

Route No. 2 — Box 807
Live Oak, Calif. — Phone 5584

Prepaid in U.S.A. Only

ITALIAN BEES

2-lb. — \$3.50

3-lb. — \$4.00

Air Mail Queens—75c each

Open date for truck delivery
May 7th.

O. K. Anderson & Son
Apiaries

Box 193, Coffee Springs, Ala.

Caucasian Package BEES AND QUEENS

Quality Caucasians
since 1937.

CHARLES HESS

Rt. 6 Box 3274-A
Sacramento, Calif.



CAUCASIANS, CARNIOLANS

Hardy, prolific, rapid build-up, finest of workers, GENTLEST OF ALL RACES — Gentleness is safest in towns, near neighbors, or near the highway. Gentleness saves time, sweat, patience and work. Northern breeders used. Untested queens \$1.20 ea. Air Mail. Discount on quantity orders. Ask. Ready March 1st. Over 25 years a queen breeder. Some packages yet.

ALBERT G. HANN
LA BELLE, FLORIDA



KATE SMITH

says—

"The American Cancer Society is leading the fight, *your* fight, against cancer through its programs of research . . . education . . . and service to cancer patients.

"Cancer strikes one in five.

"You can strike back with a generous gift. Mail it to 'Cancer,' c/o the Postmaster in your town, and your dollars will reach the American Cancer Society.

"Please send your gift today.
The need is terribly urgent."



Dadant's for Honey Labels

American Bee Journal

FLOWERS' QUALITY ITALIANS

stand the test for honey gatherers, gentle, prolific. Live delivery, health certificate, young bees and queens with all orders.

1 to 99
2-lb. pkg. with queen \$3.00
3-lb. pkg. with queen 4.00
4-lb. pkg. with queen 4.75
Extra queens—\$1.00; 100 or more 90c
Write for prices on large orders.

FLOWERS BEE COMPANY
JESUP, GEORGIA

PACKAGE BEES AND QUEENS

Booking orders for 1953.
Prices on request.

E. J. Bordelon Apiaries

Moreauville, La.

Box 33 Phone 2415

CANADIAN BEE JOURNAL

Canadian beekeepers have much in common with their neighbors in the U.S. If you are interested in bee activities "North of the Border," send us your subscription NOW. Subscription price, \$1.75 per year in U.S.A.

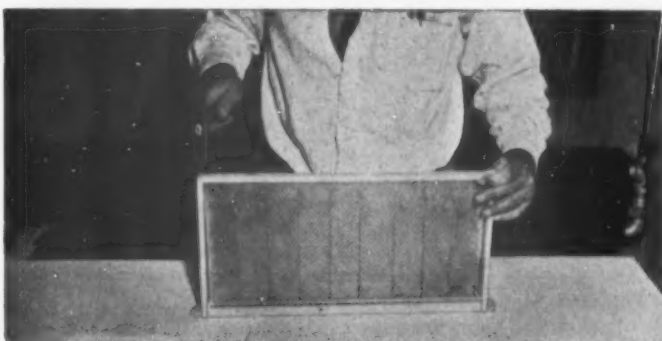
Canadian Bee Journal

Streetsville, Ontario, Canada

**A CONSTANT MARKET
FOR YOUR BEESWAX
DADANT & SONS, Inc.
HAMILTON, ILLINOIS**

Good-bye, Bench Work!

Assemble Your Frames and Foundation in Less than A Minute.
No wiring—No embedding—Only two nails.



With the new Lewis Nailless Top Bar Frame and Dadant's Gilt-Edge Crimp-wired Foundation you can reduce your costs.

The Lewis Nailless Top Bar Frame has a self-locking joint requiring no nails. There is no wedge to nail in and only two nails to use through bored holes in the ends of the bottom bar.

Dadant's Gilt-Edge Crimp-wired Foundation, requiring no wiring or embedding, snaps quickly into the frame, so you can set up the frame and the foundation in less than a minute.

This new Lewis frame fits any foundation and Dadant's Gilt-3-Edge Foundation will fit any frame with slotted bottom bar with a wedge in the top bar.

G. B. LEWIS CO., Watertown, Wisconsin
DADANT & SONS, INC., Hamilton, Illinois

40 YEARS' EXPERIENCE

Rearing and Shipping Package Bees and Queens

We should know how.
We think we do.

Good Bees - Good Service.
Good Business Relations.

WHAT MORE CAN YOU ASK?

ITALIANS — CAUCASIANS — HYBRIDS

PRICES

	Queens	2-pound & queen	3-pound & queen	4-pound & queen	5-pound & queen
1 - 24	\$1.25	\$3.75	\$4.75	\$5.75	\$6.75
25 - 99	1.15	3.50	4.45	5.40	6.35
100-499	1.05	3.25	4.15	5.05	5.95

Queens Postpaid - Airmailed and/or Clipped - No Extra Cost

Tested Queens - \$2.00 each

Queenless Package—deduct price of Queen. Packages F.O.B. Shipping Point

THE STOVER APIARIES

MAYHEW, MISSISSIPPI



MEETINGS

New Officers

Officers elected for the coming year by the North Arkansas Beekeepers Association at their meeting on February 20 are as follows: President, Guy Shaw; Vice-Pres., P. L. Blackshire; Secretary, Gladys McKay. The executive committee was called to meet for the purpose of planning an Annual Field Demonstration which will be held in the spring.

Gladys McKay, Sec'y

St. Clair Beekeepers Assoc. Belleville, Ill., April 6

The next regular meeting of the St. Clair association will be held at the County Court House in the Probate Court room on April 6 at 8 p.m. Carl E. Killion, chief apiary inspector, will be the main speaker and will show colored slides relative to comb honey production and other interesting subjects.

L. M. Leiper, Sec'y

Middlesex County Beekeepers Assoc. Waltham, Mass., April 25

The Middlesex County Beekeepers Association (Mass.) will hold their last indoor meeting April 25, 1953, at their regular winter quarters at the Mass. State Field Experimental Station in Waltham. At this meeting the association will install a package of bees into a new hive which is to be moved each month to the location of the next outdoor meeting at some member's apiary where the progress of the hive may be noted during the entire season.

In September at the last outdoor meeting some lucky member will get the hive to take home but during the season many new beekeepers will have the opportunity to study and handle the bees and get the confidence so necessary in beekeeping.

Many new and prospective beekeepers have been contacting us since the Bee Display at the Spring Flower Show in Boston last month and people that have never been near bees have now decided to try their hand at keeping some hives.

John H. Furber, Sec'y

North Arkansas Beekeepers Assoc. Harrison, April 17

The North Arkansas Beekeepers will have an all day meeting on April 17 from 9:30 a.m. until 3 p.m. at Harrison, Arkansas. There will be speakers from the University of Arkansas, Loyd Evans from the K.W.T.O., Springfield, Mo., a farm editor and others. Refreshments will be served.

Gladys McKay, Sec'y

Iowa Short Course

The Annual Short Course for beekeepers will be held at Ames on May 12 and 13. Carl Killion of Illinois is to be the guest speaker.

F. B. Paddock, Extension Apiarist

Westchester Co. Beekeepers Assoc. New Rochelle, N. Y., April 19

The Westchester County Beekeepers' Association will hold its next meeting at 2:30 p.m., Sunday, April 19 at the Odd Fellows Hall, 20 Lockwood Ave., New Rochelle, N. Y. Getting the bees ready for the coming year will be the topic of the day. Beginners who want this information should be on hand as this is one of the purposes of our organization to help them with their problems. A guest speaker is expected.

Carlton E. Slater, Publicity

Scott County Beekeepers Assoc. Davenport, Iowa, April 24

The Scott County Beekeepers will meet at the regular time, April 24, the last Friday of the month. A successful beekeepers' school was conducted on Saturday, February 28 by the Association. Fifty interested persons from western Illinois and eastern Iowa attended. Class sessions were conducted by F. B. Paddock of Ames with other speakers being R. J. Walstrom of Ames and Carl Killion of Paris, Illinois.

The Association plans another yearly picnic to be held on a Sunday afternoon during the coming June. Officers of the organization are Paul Sellman, president, and Harry Hummel, secretary-treasurer.

Harry Hummel, Sec'y

Connecticut Beekeepers Assoc. Hartford, April 18

The Connecticut Beekeepers Assoc. will hold their annual meeting and the election of new officers on the third Saturday of April.

The meeting will be held in the Hartford Y. M. C. A., corner of Pearl and Jewel streets, Hartford, Conn. The location is northeast of the Capitol Building. An interesting speaker will give a talk and an invitation is extended to all who are interested.

Philemon J. Hewitt Jr.
Chairman of Publicity

Lake Region Beekeepers Assoc. Wheaton, Minn., April 7

The spring meeting of the Lake Region Beekeepers Association will be held at Roland Housman's home in Wheaton on the evening of Tuesday, April 7.

L. W. Sundberg, Sec'y

Officers Elected

The annual spring meeting of the Virginia State Beekeepers Association was held in Charlottesville, Va., March 6, and the following officers were elected:

President—R. H. Womble, Newport News, Va.

Vice President—C. O. Jamison, Boone Mill, Va.

Sec.-Treas.—Capt. R. T. W. Duke, Charlottesville, Virginia.

G. W. Vest

Tidewater Beekeepers' Assoc. Annual Meeting

The Tidewater Beekeepers' Association conducted its annual spring meeting March 20 in the YMCA Building, Newport News, Va. Featured attractions of the beekeepers' conclave were field demonstrations, exhibits and business discussions.

A course in Modern Beekeeping at Hampton Institute, Hampton, Va., is one of the projects of the Tidewater Beekeepers' Association. Now in its second semester, students include not only those from the U. S., but from Africa and Haiti.

Conrad A. Drexel, Va.

**Western Missouri Beekeepers Assoc.
Kansas City, Mo., April 12**

The Western Missouri Beekeepers Assoc. will hold their regular monthly meeting on Sunday, April 12 at 7011 Prospect, Kansas City, Mo., beginning at 2:30 p. m. Visitors are welcome.

Mrs. Robert W. Comforth, Sec'y

**Tazewell Co. Beekeepers Assoc.
Pekin, Ill., April 12**

The Tazewell beekeepers will meet on Sunday, April 12 at the Farm Bureau Building in Pekin, Ill. The usual lunch will be served at 1 p. m. Membership in the organization has increased to a good number.

Jos. Jachman, Sec'y

**Cook-Du Page Beekeepers' Assoc.
Chicago, April 18**

Queens will be the big topic of comb honey champions, Carl Killion and son Gene at the next meeting of the Cook-DuPage Association.

The meeting will be at 7 p. m. Saturday, April 18, 1953, in the Gold Dome Building, Garfield Park Recreation Center, 3600 W. Washington Blvd., Chicago, Ill.

A. J. Smith, Sec'y



Orville S. Cox, of Shelley, Idaho (left), and Vernon Pendlebury, of Blackfoot, talk things over at the annual convention of Idaho Honey Producers held at Twin Falls in December 1952. Mr. Cox was elected president of the organization and Mr. Pendlebury, vice president. Jay Redfield, of Idaho Falls, is the new secretary-treasurer. Of top interest at the meeting was the advertising campaign carried on in Idaho last fall during National Honey Week. About \$1,000 was spent by the advertising committee for this purpose with good results in increasing the consumption of honey. It was decided to carry on a similar program during the coming year, with contributions also to the Institute and the Federation. This money is raised by a 5 cent tax per colony of bees levied and collected by the County Assessors for advertising purposes.

Miss Ruth Ann Powell, of Hampton, Virginia, and Ray H. Womble, president of the Tidewater Beekeepers' Association, look for the queen bee in one of the six observation hives which were on display in the YMCA Building in Newport News, Va., Sept. 4 and 5, 1952. The hives were on exhibit during a two-day course in beekeeping which was sponsored by the Tidewater Beekeepers' Association in cooperation with the VPI Agricultural Extension Service, Blacksburg, Va.

Conrad A. Drexel



The Market Place . . .

BEES AND QUEENS

YELLOW ITALIAN bees and queens. Real producers. Health certificate, satisfaction guaranteed. 2-lb. with queen, \$3.75; 3-lb. with queen, \$4.75; queens, \$1.00 airmail postpaid. O. E. Brown, Rt. 1, Asheboro, North Carolina.

CAUCASIAN BEES and QUEENS—Extra good workers and gentle to work with. 2-lb. with queen, \$3.50; 3-lb. with queen, \$4.50. Select queens, 1 to 25, \$1.20; 25 to 50, \$1.10; 50 up, \$1.00 each. Black River Apiaries, Currie, N. C.

LIGHT 3-BAND ITALIAN bees and queens—3 pound package, \$4.70; 4 pound, \$5.65; 5 pound, \$6.60. Queens, \$1.00. Bees delivered. Luther Pickett, Owner Orange Bee Co., Edand, N. C.

THREE-BANDED ITALIAN bees and queens—Best of quality, good workers and gentle. 2-lb. with queen, \$3.50; 3-lb. with queen, \$4.50; \$1.00 for each additional pound of bees. Select queens, 1 to 25, \$1.20; 25 to 50, \$1.10; 50 up, \$1.00. Alabama Bee Company, Graham, N. C. Phone 4703.

DARK ITALIAN BRED for heavy production—3-lb. package with queen, \$3.60. Queens, \$1.00. Henry Loehr, Caldwell, Texas.

YANCEY HUSTLER package bees and queens. Ready April 1st. Booking orders; no advance payment. 2-lb. package with queen, \$3.50; 25 or more, \$3.25 each; 3-lb. package with queen, \$4.50; 25 or more, \$4.25 each. Satisfaction guaranteed. Caney Valley Apiaries, Bay City, Texas.

GOLDEN ITALIAN QUEENS that produce large gentle bees, excellent honey producers. Price, \$1.00 each. Live arrival and health certificate guaranteed. Alvin J. Ducote, Hamburg, La.

GOLDEN ITALIAN bees and queens—Very yellow and gentle. 2-lb. with queen, \$3.50; 3-lb. with queen, \$4.50. Select queens, 1 to 25, \$1.20; 25 to 50, \$1.10; 50 up, \$1.00. Carolina Bee Farm, Graham, N. C.

CAUCASIANS—2-lb. pkg., \$3.00; 3-lb. pkg., \$4.00. Untested queens, \$1.00 each; one hundred, \$75.00. Tillery Brothers, Greenville, Ala.

ITALIAN QUEENS from our best producing colonies. March 1st on. Coralita Apiaries, Rt. 2, Box 353, Homestead, Fla.

HIGH GRADE BEES & QUEENS—Write for prices. Dalice E. Crawford, Rt. 1, Haw River, N. C.

BEES, QUEENS, BEE SUPPLIES, HONEY—30 years' service. Harris Bee Supply, Jackson, Tenn.

PACKAGE BEES—Lower Austrian queens. 2-lb. pkg. with queen \$3.50; 3-lb. pkg. with queen \$4.10; hundred packages, \$3.00 each. The Coffey Apiaries, Whitsett, Texas.

CERTIFIED ITALIAN BEES—Fifty cents pound after May fifteenth. You supply cages. A. V. Dowling, Valdosta, Georgia.

THE NORMA ROY APIARY Italian bees—3-pound with queen \$3.50; 4-pound with queen \$4.00; queenless package, deduct 75c from above price. A health certificate with shipment. Norma E. Roy & Son, Hessmer, Louisiana.

CAUCASIANS—Personally raised, large queens, gentle, good workers. 1-19, \$1.10; 20 up, \$1.00 each. Fred Brock, McDonald, Tenn.

CAUCASIAN QUEEN BREEDERS—Specializing in pure Caucasian breeding stock. Truly northern raised, in isolated location. J. E. Hastings, Birch Hills, Sask.

FOR SALE

FOR SALE—80 colonies bees and equipment. Donald Horton, Box 349, Chanute, Kansas.

Copy for this department must reach us not later than the tenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rate of Classified advertising—13 cents for each word, letter, figure or initial, including the name and address. Minimum ad, ten words.

As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other references with your copy.

Advertisers offering used equipment or bees on comb must guarantee them free from disease or certificate of inspection from authorized inspector. The conditions should be stated to insure that buyer is fully informed.

FOR SALE—Complete bee business consisting of 200 colonies, in five apiaries, plenty of equipment including extractor and tanks. Located in one of Michigan's best bee and honey counties. All state inspected in 1951. John Keller, Jasper, Mich.

474 colonies bees and all equipment, honey house, modern home, or bees without home or honey house. Would rent honey house. J. T. Camp, Hot Springs, Montana.

FOR SALE—350 colonies of bees with equipment for 900. Complete honey house equipment. Kenneth Heindl, Rt. 2, Reese, Mich.

FOR SALE—Complete 10,000 jars, per 8 hours, automatic and semi-automatic bottle filling unit, as follows: 1 16 sheet Cellulo filter (14" sheets), capacity 6 tons per 7 hours; 1 Bump Pump for filter; 1 2 spout automatic Elgin Bottle filler with 3 foot extension track, capacity 1600 bottles per hour; 1 13 foot stainless steel track bottle conveyor; 1 National semi-automatic labeler, capacity 1200 bottles per hour; 1 Taco flash heater; 10 50-lb. bags filter aid; 1500 filter sheets. All the above equipment is from one to three years old and in perfect condition. This equipment now would cost not less than \$4500. We will give a new equipment guarantee for one year. The price is \$2950. Alexander Company, 819 Reynolds Road, Toledo, Ohio.

FOR SALE—New electro-flo filling machines. Model SA100—\$365.00. Model SA200—\$285.00. 2-lb. Hancock Honey House, Hancock, Iowa.

FOR SALE—One row automatic Elgin bottling machine like new, \$895.00. One World semi-automatic labeling machine, good condition, \$250.00. Russell Smalley, Beaver, Iowa.

FOR SALE OR LEASE—Modern extracting plant in the clover region. Buildings, equipment, 50x70 lot, 1/2 block from trunk highway, within city limits. Running water and electricity. For further particulars write A. V. Larson, Madison, Minn.

FOR SALE—12 colonies bees and good equipment. John Stuckey, Frankfort, Illinois.

38 colonies, Mod. Dadant, with equipment for 800. Ralph H. Wilson, 1511 Root St., Flint, Mich.

FIFTY SURPLUS new Lewis 10-frame Jumbo or Quinby depth hive bodies. Original packs K.D. \$8.75 for five. Complete with Lewis Modified Dadant frames, \$15.25 for five. Special price on entire lot. Shenandoah Valley Bee Co., Rt. 2, Martinsburg, W. Va.

ONE 4-frame reversible extractor and honey tank, \$50.00. Located on Oscar Lambers place, 9 mi. northwest Savannah, Mo. Owner, C. O. Lundin, Rt. No. 2, Box 275, Pine Bluff, Ark.

FOR SALE—30 colonies bees, 10-frame, no disease, strong. Extra hive body or 2 food supers. Johnson Bros., Toulon, Ill.

COMPLETE OUTFIT, 1500 ten-frame hives and equipment in northern Minnesota, best honey producing territory. Bees, supers, honey house and lots of extras. Parent Apiaries, Fertile, Minn.

43 colonies of bees in double hive bodies; 1 45-frame extractor; 1 4-frame hand extractor; 1 100-gallon tank. Equipment enough to operate 75 colonies. Plenty of excluders, empty hive bodies, etc. Clifford L. Cox, 7245 Rolston Road, Linden, Mich.

1,000 10-frame 6 1/2-inch supers with combs drawn from crimp wired foundation. No disease. Only \$2.00 each. E. E. Salge, Box 59, Garland, Texas.

FOR SALE—Eight and ten frame, standard beekeeping equipment, clean, for 300 colonies. George R. Stanek, Sturgeon Bay, Wisconsin.

DUE to sprained shoulder I will dispose of 30 colonies, two stories. Cash or swap for modern power tools, motor, guns. R. Helke, Wenona, Ill.

70 colonies bees, disease free. Ten-frame homemade hives. With or without 1 1/2 acres land, 2-room house 14x16. On highway. Joe Minichowski, Box 323, Hokah, Minnesota.

ONE HUNDRED to two hundred 9 fr. 1 1/2 story colonies at \$9.00. J. W. Lunsford, Ludowici, Ga.

COMPLETE BEE BUSINESS—1000 hives of bees, extractors, storage tanks, 1 1/2-ton Chevrolet, 1 1/2-ton Chevrolet, established packing business, disease free, located in central Florida. Write Box 49, c/o American Bee Journal, Hamilton, Ill.

FOR SALE—Large holding tanks, new or used. Sioux Honey Association, Sioux City, Iowa.

HONEY AND BEESWAX WANTED

WANTED—All grades extracted honey. Send sample, price and quantity. Deer Creek Honey Farms, London, Ohio.

WRITE FOR SHIPPING TAGS and current quotations on rendered beeswax. Any amount from one pound up bought. If you have 25 pounds or more, save 25% by letting us work it into foundation for you. Walter T. Kelley Co., Clarkson, Kentucky.

CASH PAID for white and amber extracted honey. Send samples and state quantity available. Prairie View Honey Co., 12303 Twelfth St., Detroit 6, Mich.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 2613 South Yates Ave., Los Angeles 22, Calif.

CARLOADS or less of honey and wax. Send sample and price. Alexander Co., 819 Reynolds, Toledo, Ohio.

WANTED—Extracted honey, white or light amber, in 60's. State price in first letter. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

WANTED—All grades comb and extracted honey, large or small amounts. Quote price in first letter. Mail sample. King Honey Co., 4308-10-12 E. Truman Road, Kansas City, Mo.

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Apiaries, Manufacturers of Bee Supplies and Comb Foundation. Onsted, Michigan.

WANTED—Cut-comb and strained. Send samples and price. Cole Honey Co., 4460 Piedmont Ave., Oakland, Calif.

WANTED—Water white clover honey, truck or car lots; also light amber. Mail sample and lowest cash price. Write Stoller Honey Farms, Latty, Ohio.

HONEY FOR SALE

ANY GRADE—any amount. Alexander Company, 819 Reynolds, Toledo, Ohio.

800 cans white clover honey. John Tidewell, 2711 North 63rd St., Omaha, Nebr.

HONEY LABELS

Improved designs, embodying color, balance, simplicity, and distinction. Please send for free samples & prices.

C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

CLOVER EXTRACTED HONEY in sixties. Ralph Gamber, 910 State, Lancaster, Pennsylvania.

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BEE SUPPLIES—Catalogue free. Hodgson Bee Supplies Ltd., 565 13th Ave., New Westminster, B.C., Canada.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

THE BIGGEST BEE SUPPLY CATALOGUE PUBLISHED (64 pages) free for the asking. Big factory manufacturing a complete line of wooden goods, comb foundations, metal goods, veils and gloves, carloads in stock, daily shipments, save 20%. WALTER T. KELLEY CO., CLARKSON, KENTUCKY.

THE ONLY COMB FOUNDATION PLANT in the East. We sell foundation, work your wax, render combs and cappings. Robinson's Wax Works, Rt. No. 3, Auburn, New York.

BEE SUPPLIES—Tin packages, 10 sizes glass jars, paper shipping supplies, window cartons and other items. Roscoe F. Wixson, Dundee, N. Y.

SOUTHERN CALIFORNIA HEADQUARTERS for Bee Supplies. Make our facilities your "Trading Post." Complete stocks. See our Bulletin Board for Budget Bargains. The Diamond Match Company, 1300 Produce St., Los Angeles 21, Calif.

FOR SALE—New heart cypress 10-frame bottom boards K.D. 10 or more, \$1.00 each; 50 or more, 90c each; 100 or more, 85c each. 1 nailed up sample, postpaid \$1.25. Fred L. Poole, Rt. 2, Bx. 67, Elizabethtown, N. C.

"Backlot Beekeeping by Pigeon"—Book on management in plain language for small beekeepers. \$2.00 postpaid. Carlton Slater, Bronson Ave., Larchmont, N. Y.

SOLD MY BEES. Will have no more queens. Better raise your own queens. Get my book "Better Queens." Both a pleasure and profitable. "Better Queens" \$4.00 per copy postpaid. Jay Smith, Rt. 2, Fort Myers, Florida.

POSITIONS AND HELP WANTED

WANTED—Help for work in bee yards and packing plant. Experience not essential. Excellent wages, plus bonus. Other advantages. Schultz Honey Farms, Ripon, Wisconsin.

SEEDS AND TREES

HONEY PLANTS—Seeds—Trees—Plants. Free illustrated catalogue. Special: 37 plants (6 varieties labeled) attractive, unusual bee-garden perennials, \$5.00 postpaid. Pellett Gardens, Atlantic, Iowa.

For NECTAR of higher sugar concentration—European Basswood 3 feet, \$2.25; 4 foot, \$2.75 each. Any following collections, \$1.20; three for \$3.25; six for \$5.00, postpaid—1 pink flowering Hops Crab, 2 foot; 5 Sumac Glabra, 18"; 5 Sumac Staghorn, 18"; 5 Harrington Pink hardy Aster divisions; 6 Lavender V. Hardy Aster divisions; 5 Salvia Pratensis, (blue sage) 2 year; 3 Nordens Pink Loosestrife divisions. List of new additional varieties free. Nicollet County Nursery, St. Peter, Minn.

THE AUSTRALASIAN BEEKEEPER

The senior beekeeping journal of the Southern Hemisphere provides a complete cover of all beekeeping topics in one of the world's largest honey producing countries. Published monthly by Pender Bros. Pty. Ltd., Box 20, P.O. Maitland, N.S.W., Australia. Subscription by Bank Draft or International M.O. 15/- (approx. \$2.15) per year, post free. Sample copy free on request.

Sue Bee Says . . . Spring is close at hand (believe it or not). And, with spring, comes the need for bee supplies. And here we are, folks.

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Supply Dept.
Box 1107, Sioux City, Iowa
(Agents for Bogenschutz Uncapper.)

MISCELLANEOUS

KNOW interesting facts concerning the bees of India through the INDIAN BEE JOURNAL, published in English, by the Bhupen Apiaries (Himalayas), Ramgarh, Dist. Nainital, U.P., India, and obtainable from them. Subs. Rs. 7/- or 10 Shillings or \$2.25 per annum. Single copy Rs. 3/- or 1/9 or 49 cents (international money order). Payment in mint postage stamps of your country accepted.

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more shepherds with more information of range sheep than any magazine published. Subscription \$1.00. Hotel Cactus, San Angelo, Texas.

A CONSTANT MARKET FOR YOUR BEESWAX

DADANT'S, Hamilton, Illinois

Michiana Beekeepers Assoc.

South Bend, Ind., April 19

The next meeting of the Michiana Beekeepers Association is scheduled for April 19 at 1:30 P. M. at the YMCA in South Bend.

W. M. Phipps, Sec'y

Mrs. Woodman Passes . . .

We regret to announce the death of Mrs. A. G. Woodman which occurred March 11 at Grand Rapids, Mich. Mrs. Woodman added much to the many bee meetings she attended with her husband. She is survived by her husband, son Baxter, two daughters, three grandchildren and two great-grandchildren.

Mrs. Woodman was quite prominent in Grand Rapids civic affairs until recent years.

BEE WORLD

Including

APICULTURAL ABSTRACTS

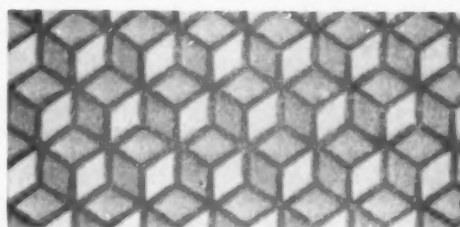
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AMERICAN BEE JOURNAL

HAMILTON, ILLINOIS

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For Those Who Need a Foundation to Suit Their Special Methods. Many beekeepers have their own methods of supporting bee comb foundation and putting it in the frame; ways they have used for years. For them Dadant's Plain Foundation offers an inexpensive, beautifully milled foundation, without wires, that will give the utmost in satisfaction. The cells are sharp and clear cut, with strong side walls and good, solid bases. Each sheet is inspected so you get only the perfect ones, hand sorted and tissue packed, in tight fitting cartons.

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Maximum production is assured when you use our production bred Italians. You will be pleased with our fine quality and friendly service.

1953 PRICES

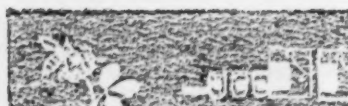
	Queens	2-Lb. Pkg.	3-Lb. Pkg.	4-Lb. Pkg.	5-Lb. Pkg.
1-10	\$1.15	\$3.30	\$4.15	\$5.00	\$5.85
10-up	1.00	3.15	4.00	4.85	5.70
Tested Queens	2.00				

Above prices are with young queen, F.O.B. shipping point. Your order will receive our prompt, careful attention.

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CROP & MARKET

by M. G. Dadant

Condition of Bees

The unusually mild winter throughout the whole country has resulted in bees coming through with a minimum amount of losses except in a few cases where the drought in the fall interfered with securing of sufficient stores for winter and the deficiency was not made up, apparently, by the beekeeper.

Naturally with such moderate conditions and the long moderate fall there is a tendency for bees to run short during the spring season, although in most cases beekeepers had provided excellently for storage sufficient to carry them through.

However, it would behoove our readers to examine their colonies closely and immediately. Any prolonged rainy spell during the spring might mean a shortage of stores.

These conditions for bees exist practically all over the country and in the Canadian Provinces.

Moisture

The Central West and many Southern and Eastern areas had a great deficiency of moisture during 1952. This has been made up to a large extent throughout the Southeast and in most central western areas. However, as one beekeeper expressed it, "We have had plenty of water but no snow." That means that there was a proportionately large run-off of the fall and winter rains and a proportionate difficulty of freezing and thawing on the clovers.

As we stated the rains have largely made up for the fall deficiency. However, the western areas extending from Montana down through the western Dakotas, Kansas, Nebraska and into western Texas and Oklahoma are still deficient of moisture.

Similarly the mountain areas have not had the snows necessary to

guarantee them ample water for irrigation.

Along the coast and particularly in California, prospects would seem unusual following the big boom year of 1952. In the desert areas they were not beyond repair at the time this was written but conditions have become unfavorable on account of lack of moisture and desert plants are beginning to show that they are stunted and naturally might lack bloom and nectar. No doubt conditions are not as good as in 1952.

In eastern Canadian areas moisture is still deficient but seems to be better in the western provinces and on the coast.

Honey Plants

Naturally with the shortage of moisture in 1952, honey plants did suffer and although much of this has been made up by rains in most of the central and southern areas, there is a question as to whether the soil moisture has been replenished and also whether the plants will come through in quantities and in conditions to warrant a honey crop. We can say however, that conditions are far improved over what might have been anticipated in September of last year following the drought.

Our reporters indicate that in the legume areas there is not as much prospect for the clovers as in 1952, but of course this might be made up by favorable conditions during the blooming period.

There has been a tendency, on account of the freezing and thawing and lack of snow, for heaving of some clovers but we do not believe that this has been sufficiently heavy to make any great inroad on such clover as there is. Similar conditions are reported in Ontario and Quebec.

The southeastern sections are perhaps the best, since they are largely dependent upon shrubs and trees, their early flows have seemed excellent and the prospects look unusually bright.

Honey Stocks

Honey in the hands of beekeepers is pretty generally sold out. In fact we have some reports of consistent demand for amber grades in thousand can lots which apparently cannot be filled. This is likely for export.

We must not lose track of the fact that some 14 million pounds of honey are under loan or price support. Apparently the beekeepers who have this under loan are satisfied to let the government have it at this figure rather than withdraw the honey and make an effort to sell it. This is shown by the fact that the loans have been paid on only about a quarter of a million pounds.

We must also take into consideration that some 25 million pounds were sold abroad under the export program, more than half of this going to the Federated Republic of Germany.

When we consider, however, that the United States had its biggest crop, ever, the honey situation does not seem too much out of the way. And if we have disposed of all the honey outside of some 40 million pounds in which the government has had a hand, perhaps the markets are now being revived and our 1953 crop may move without much government help.

All in all, we believe that beekeepers are encouraged by the condition of bees, in most cases by the prospects for at least an average honey crop, and no doubt in most sections entirely pleased with the movement of honey and, pretty generally, with its price.

Honey Wanted— Care and less than car. Top Prices.
C. W. Aeppler Co., Oconomowoc, Wis.

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CRIMP-WIRED FOUNDATION

The Choice
Of Expert
Beekeepers

In heat or cold the hooks will hold

The crimped wires radiate shoulders of strength

Wires of special steel for greatest support

Accurate embedding so bees use every inch

Made only from pure beeswax

Refined for utmost cleanliness

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Cell walls a guide to perfect comb

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All cells just alike

Every sheet the same

Carefully and rigidly inspected

Securely and safely wrapped

The Hooks WILL HOLD

You can't pull them out. Laboratory tested for holding power, these hooks, in high heat and with a fifty-pound load, never did pull out. They are steel hooks, bent exactly by special machines that took years to produce. They are your extra guarantee of safety for the heavy demands of today's beekeeping. They hold your combs rigidly in the frames giving you extra insurance for a lifetime of use.

Gives You LIFETIME COMBS

I was one of the first to use Dadant's Crimp-wired Foundation and I soon found the combs sometimes pulled out at the top bar. I put the first hooks in by bending the extended wires by hand and I told the Dadants about it. It took a long time for them to do the job by machine but, they did it. I got some of the first of the foundation with hooks and it has always given me combs you just cannot beat.

L. A. Syverud
Aberdeen
South Dakota



90 YEARS of beekeeping experience — 75 years of foundation making. The first fifteen years laid the experience that made it possible in the succeeding seventy-five years to make the world's finest bee comb foundations.

PURE BEESWAX—Dadant's Foundations are made of pure beeswax, just as your bees make it. So wax from your combs is worth the highest market price and is safe for food use.



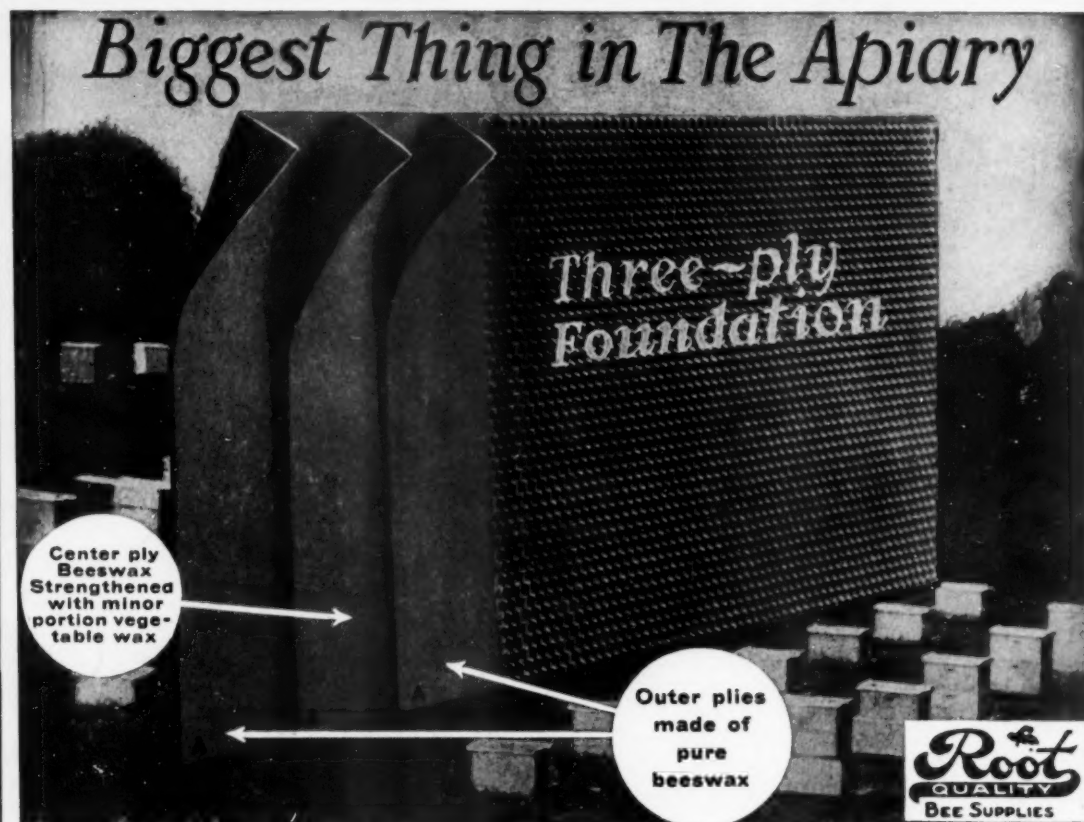
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